## SECTION IV - TUMOR DATA

Primary Site Code

NAACCR Version 9.1 field "Primary Site", Item 400, columns 227-230

Enter the code for the site of origin from the Topography section of ICD-O-3. [Note that ICD-O-2 code C14.1, laryngopharynx, should not be used for diagnoses made on or after January 1, 1995. "Laryngopharynx" became an equivalent term under C13.9 (hypopharynx, NOS) as of this diagnosis date. Code C14.1 is not an ICD-O-3 code.]

Enter the site code that matches the narrative primary site indicated in the medical record, or the site code most appropriate for the case. Site codes are found in ICD-O-3's Numerical Lists - Topography section (pages 45-65) and in its Alphabetic Index (pages 105-218).

In ICD-O-3, primary site codes consist of the letter "C" followed by two digits, a decimal point, and a third digit. "**C**" should be entered, but the decimal point should *not* be entered.

*Example*: The primary site is "cardia of stomach". Look this up in the Alphabetic Index of ICD-O-3 under "stomach" (it's not under "cardia"), and the corresponding code is found to be "C16.0". Enter the four-character code **C160**.

Most sites include a third digit of "8" to be used for single tumors that overlap the boundaries of two or more anatomically contiguous subsites and whose exact origin cannot be determined, unless the combination of sites is specifically indexed elsewhere. For example, a tumor *originating* in the breast upper inner quadrant (C50.2) that has grown into the lower inner quadrant (C50.3) is assigned to the point of origin, **C502**; a tumor overlapping those two subsites whose exact origin is *not* determined would be assigned to **C508**. A carcinoma of the esophagus and stomach may be assigned to **C160** (esophagogastric junction) rather than a ".8" site.

Some ".8" sites cover a single tumor overlapping multiple primary sites rather than just subsites; for example, **C218** is used for a lesion overlapping the rectum (C20.9), anus (C21.0) and anal canal (C21.1), and **C148** covers the lip, oral cavity and pharynx; see Table 17 on page 25 of ICD-O-3 for more of these codes.

Most sites also include a third digit of "9" to be used when a subsite is not specified, and for multiple tumors originating in different subsites of the organ. Sites C14, C21, C22, C30, C38, C42, C48 and C76 do not have ".9" codes. Not all "NOS" site terms have codes ending in ".9", however; for example, "bile duct, NOS" is assigned to C24.0 and "pharynx, NOS" is C14.0. Some sites have *only* a ".9" code to define them (C01, C07, C12, C19, C20, C23, C33, C37, C52, C55, C56, C58, C61, C64, C65, C73, C80).

## Site-Associated Morphologies

Some types of neoplasms are normally associated with certain primary sites. For example, hepatocellular carcinoma (8170/3) arises in the liver (C22.0); therefore, “hepatocellular carcinoma”, with no other statement about topography, should be coded to primary site **C220**. If the patient's medical record contains a morphologic term which has an associated site code in ICD-O-3, use this site code if no definite site is given or if only a metastatic site is given.

If the site specified by the physician differs from the associated site referred to in ICD-O-3, report the site specified by the physician.

*Example*: A medical record describes infiltrating duct carcinoma (8500/3) of the pancreas. Assign site code **C259** (or a more specific portion of the pancreas, if possible) even though ICD-O-3 suggests that the primary site breast (C50._) is most ordinarily associated with this morphology.

For a more extensive discussion of site-associated morphologies, see "Rule H" in the "Summary of Principal Rules for Using ICD-O" and "Coding Guidelines for Morphology" sections (page 21 and pages 32-33) in ICD-O-3.

## Pseudo-topographic Morphology Terms

Some *morphology* terms contain, or seem to contain, primary site terminology; but do not let these terms confuse your choice of primary site code when the medical record indicates otherwise. Two examples are "adenocarcinoma, intestinal type" (8144/3) with an associated site of stomach (C16._) rather than an intestine site, and "adenoid basal carcinoma" (8098/3) with an associated site of cervix uteri (C53._) rather than adenoid. See specific examples on page 33 in ICD-O-3. Also, do not confuse some histologic adjectives like "endometrioid" with similar sounding site terms like "endometrium".

## Primary-Versus-Secondary (Metastatic) and Ill-Defined Sites

A primary site should always be reported to the MCR, rather than a metastatic or secondary site. If the place of origin cannot be identified exactly, use the following guidelines:

- NOS subcategory (usually ends with ".9"): Use these codes when an organ subsite is not specified. Do *not* use the NOS code if a more descriptive term is available.
- Other and Ill-Defined Sites (C76.0-C76.8): These may be used for diagnoses that refer to ill-defined sites or body regions, such as "pelvis", "arm" or "head". These sites contain several types of tissue (bone, skin, soft tissue). If the type of tissue in which the cancer originated can be identified or inferred, code a more specific site than C76._.
- Unknown Primary Site (C80.9): If the primary site is unknown, and the only available information is from a metastatic/secondary site, enter **C809** [but see also the sections **Site-Associated Morphologies** (above) and **Special Primary Site Conditions** below].

## Special Primary Site Conditions

Special rules apply to the following cases.

- Breast Duct, Lobular and Other Carcinomas: See pages 19-20 for a discussion of certain mixed lesions of the breast. If these lesions occur separately but simultaneously in different quadrants (subsites) of the same breast, enter site code **C509**.
- Subareolar / Retroareolar Tumors: Code to central portion of breast (**C501**) to indicate that the tumor arose in tissue beneath the nipple and not in the nipple (C50.0) itself.
- Familial Polyposis: When multiple carcinomas arising from familial polyposis involve multiple segments of the colon (or colon and rectum), code the primary site as colon, NOS (**C189**).
- Kaposi Sarcoma (9140/3): Code the primary site in which the tumor arises. If Kaposi sarcoma arises in the skin and another site simultaneously, or if no primary site is stated, code to skin, NOS (**C449**).
- Leukemias (*except* myeloid sarcomas) (9800-9920, 9931-9948): Code to bone marrow (**C421**). See "Rule E" on pages 20 and 26 in ICD-O-3. Myeloid sarcomas (9930) are coded to the site of the leukemic deposit.
- Cross-Indexed Lymphomas/Leukemias: ICD-O-3 coding has introduced some new wrinkles in assigning primary site for some closely related hematologic diseases. See details on pages 80-81 in this MCR Manual.

- Nodal Lymphomas: If no primary site is given but the lymphoma is described as nodal in origin (or is suspected of being nodal in origin), enter **C779** (lymph node, NOS) rather than C809. If a nodal lymphoma involves multiple lymph node regions at diagnosis, code to **C778** (lymph nodes of multiple regions). Nodal lymphomas include those arising in *lymphatic tissue* outside lymph nodes, such as in the tonsils, spleen, Waldeyer ring, small intestine Peyer patches, or thymus. See "Rule D" on page 26 in ICD-O-3.
- Extranodal Lymphomas: See "Rule D" on page 26 in ICD-O-3, and "ICD-O-3 Errata and Clarifications, 5/22/01, Rule D: coding extranodal lymphomas". Code to the appropriate extranodal site (e.g., stomach, lung, skin) when there is no nodal involvement of any kind, or if it is recorded that the origin was a specific extranodal site. If a lymphoma is described as extranodal in origin (or is suspected of being extranodal in origin), and lymph nodes are not involved, but the exact primary site cannot be determined, assign an unknown primary site (**C809**) rather than C77.9; but if lymph nodes *are* involved, an extranodal lymphoma may be coded to a lymph node primary site (**C77_**) if the specific extranodal point of origin cannot be determined.
- Lymphoreticular Process: For malignancies of the lymphoreticular process classified as *myeloproliferative* (arising in bone marrow), code to bone marrow (**C421**). For lymphoreticular process malignancies classified as *lymphoproliferative* (arising in lymph tissue), code to lymph node, NOS (**C779**). Code *unspecified* malignancies of the lymphoreticular process to reticuloendothelial system, NOS (**C423**).
- Melanomas (8720-8790): If the primary site is unknown, code to skin, NOS (**C449**) unless a non-skin associated primary site is given in ICD-O-3 (for example, a spindle cell melanoma of type A (8773) would be assigned to **C69_** unless a different site is specified in the record).
- Neuroblastomas (9500): Code neuroblastomas of ill-defined sites to the most likely site for each case. [Medulla of adrenal gland (**C741**) is a common site.] If the primary tumor's location is unknown, enter **C499** (connective, subcutaneous and other soft tissues, NOS).
- Prefixes: If a topographic term is modified by a prefix like "peri", "para", "pre", "supra", "infra" or similar modifiers, and the modified term is not specifically listed in ICD-O-3, assign the corresponding ill-defined site if the histology does not have an associated site. This rule also applies when tumors are described as originating "in the area of" or "in the region of" a specific site. (See Rule B on pages 20 and 25 in ICD-O-3.) For example, a tumor only described as arising "in the area of the rectum" should be assigned to **C763** (pelvis, NOS) because the type of tissue in which the tumor originated is not specified; "perirenal tissue" is assigned code **C480** in ICD-O-3, but a "perigastric" tumor should be assigned to **C762** (abdomen, NOS).

## Inferred Primary Site and Experience

Lastly, text from the medical record cannot always be taken *literally* in assigning a primary site code. The need to assign a Primary Site Code to each cancer case is not always on the mind of individuals writing descriptions in the medical record. The general location of a tumor may be described rather than the specific type of tissue in which it arose, and sometimes a primary site must be *inferred* from information in the record. If your common sense and experience as a cancer registrar tell you that the medical record is indicating a very unusual primary site for a given diagnosis, be sure to verify this. For example, for simplicity a medical record may contain a phrase like "lung mesothelioma", "carcinoma of the mandible", "uterine sarcoma", "cholangiocarcinoma of the liver", "brain meningioma" or "lymphoma of the mediastinum" to describe the *general* anatomic location of a tumor rather than its exact organ or tissue of origin.

If the combination of morphology and primary site for a particular case is unusual enough to trip an automated edit, and if you have verified the information, please note in the "Comments/Narrative Remarks" field that this combination was verified, and indicate how it was verified.

If the primary site is unclear or doubtful in the medical record, document this in the "Comments/Narrative Remarks" field and indicate why you chose the site code that you're reporting. For example, you might say, "probable lung primary", or "ovarian or lung primary? treatment as for ovary", or "MD favors lung primary".

Laterality

NAACCR Version 9.1 Item 410, column 231

Use the following codes to classify the Laterality *of the primary site* at diagnosis:

| **Laterality** | **Code** |
|---|---|
| not a paired site, including unknown primary | **0** |
| Right side is origin of cancer. | **1** |
| Left side is origin of cancer. | **2** |
| only one side involved, right or left origin not specified | **3** |
| bilateral involvement, but origin unknown -- and stated to be a single primary (including bilateral ovarian primaries of the same histologic type diagnosed within 2 months of each other; bilateral retinoblastomas; and bilateral Wilms tumors) | **4** |
| paired site, but no information concerning laterality; midline tumor in a paired site | **9** |

Laterality must be coded for each case reported.

For an unknown primary site (C80.9), enter code **0**.

Code **4** should not be used for bilateral primaries for which separate abstracts are prepared, nor when the side of origin is *known*.

*Example*: For a left ovarian primary with metastasis to the right ovary, enter code **2** (not **4**).

Laterality codes **1**-**9** must be used for the sites in **Table IV.1** (next page) *except as noted*. Only major ("preferred") terms are listed in this table; however, Laterality must be coded for all ICD-O-3 terms at these sites unless specifically excluded in the table's text. Such exclusions are unpaired subsites and must be coded **0**.

*Examples*: Primary Site is carina (unpaired), C34.0 - enter Laterality code **0**.
Primary Site is main bronchus (paired), C34.0 - enter a Laterality code **1-9**.

For paired primary sites, the narrative field for Primary Site must include text that will verify the Laterality (see page 78).

## Table IV.1 Paired Organ Sites

(also listed by code and alphabetically in Appendix B)

| ICD-O-3 Code | Site |
|---|---|
| C07.9 | Parotid gland |
| C08.0 | Submandibular gland |
| C08.1 | Sublingual gland |
| C09.0 | Tonsillar fossa |
| C09.1 | Tonsillar pillar |
| C09.8 | Overlapping lesion of tonsil |
| C09.9 | Tonsil, NOS |
| C30.0 | Nasal cavity (excluding nasal cartilage, nasal septum) |
| C30.1 | Middle ear |
| C31.0 | Maxillary sinus |
| C31.2 | Frontal sinus |
| C34.0 | Main bronchus (excluding carina) |
| C34.1-C34.9 | Lung |
| C38.4 | Pleura, NOS |
| C40.0 | Long bones of upper limb, scapula and associated joints |
| C40.1 | Short bones of upper limb and associated joints |
| C40.2 | Long bones of lower limb and associated joints |
| C40.3 | Short bones of lower limb and associated joints |
| C41.3 | Rib, clavicle and associated joints (excluding sternum) |
| C41.4 | Pelvic bones and associated joints (excluding sacrum, coccyx and symphysis pubis) |
| C44.1 | Skin of eyelid |
| C44.2 | Skin of external ear |
| C44.3 | Skin of other and unspecified parts of face (midline code **9**) |
| C44.5 | Skin of trunk (midline code **9**) |
| C44.6 | Skin of upper limb and shoulder |
| C44.7 | Skin of lower limb and hip |
| C47.1 | Peripheral nerves and autonomic nervous system of upper limb and shoulder |
| C47.2 | Peripheral nerves and autonomic nervous system of lower limb and hip |
| C49.1 | Connective, subcutaneous, and other soft tissues of upper limb and shoulder |
| C49.2 | Connective, subcutaneous, and other soft tissues of lower limb and hip |
| C50.0-C50.9 | Breast |
| C56.9 | Ovary |
| C57.0 | Fallopian tube |
| C62.0-C62.9 | Testis |
| C63.0 | Epididymis |
| C63.1 | Spermatic cord |
| C64.9 | Kidney, NOS |
| C65.9 | Renal pelvis |
| C66.9 | Ureter |
| C69.0-C69.9 | Eye and adnexa |
| C74.0-C74.9 | Adrenal gland |
| C75.4 | Carotid body |

## Narrative Primary Site

NAACCR Version 9.1 field "Text--Primary Site Title", Item 2580, columns 3367-3406

Describe the exact primary site in narrative form, using up to 40 characters. (If you need more space, continue your description in another text field.) A primary (rather than secondary) site must be identified properly for each case.

Information regarding primary site can be found in several sections of the medical record, and care should be taken to locate the most specific and accurate identity of the primary site. This is most often found in the pathology report. If the medical record contains conflicting information regarding primary site, information in the pathology report should take precedence over information found in other sections of the medical record. If the primary site is still unclear, a physician should be consulted.

Do not use an inappropriate automatic text label for the Primary Site Code (such as "skin of upper limb and shoulder" instead of "**skin right forearm**") to complete this field. This text is used to verify Primary Site Codes and help identify multiple reports received for the same case with different site codes.

When a paired primary site is involved, *different* Laterality codes may be sent in by different facilities for the *same* case, making these appear to be reports of separate primaries. Important: We need text to verify the Laterality as well as the Primary Site Code for paired sites. Add text like "right" or "lt" to verify the Laterality for paired sites.

For colorectal primaries, if the exact location of the cancer is described by a distance measurement from the anal verge, please include this measurement with your text. This is important because: *each* code C18.0-C20.9 (twelve codes) represents a separate primary site; because some facilities/pathologists never use the site C19.9 (rectosigmoid junction); and because it is very common for a single colorectal primary to be reported by different facilities under different Primary Site Codes, causing these reports to look like separate cases.

If the combination of primary site and morphology is unusual enough to trip an automatic edit, include a note that this unusual combination has been verified by you as correct, and note how you verified it. These remarks could be in this field, the Narrative Histology/ Behavior/Grade field, or in Comments/Narrative Remarks.

If the primary site was unclear or doubtful in the record, indicate that here. If the primary site is truly unknown, enter "**unk primary site**" or some text that explains your choice of the code **C809**, such as "**liver mets found**", "**bx abdominal mass**" or "**possible lung or GI?**". (See the "Primary Site Code" section on pages 71-75.)

## Histology / Behavior / Grade

ICD-O-2 Histologic Type Code

NAACCR Version 9.1 field "Histology (92-00) ICD-O-2", Item 420, columns 232-235

Refer to the Third Edition of this manual for coding diagnoses made before 2001.

ICD-O-3 Histologic Type Code

NAACCR Version 9.1 field "Histologic Type ICD-O-3", Item 522, columns 253-256

Enter the Histologic Type Code from the Morphology section of ICD-O-3. Histology codes appear in both the Numerical Lists--Morphology (pages 69-104 in ICD-O-3) and in the Alphabetic Index (pages 105-218).

Note: Both topography and morphology terms are included in the Alphabetic Index. Morphology codes are identified in this section with "M" preceding the code, but do not enter "M" in this field. Note that leukemias and lymphomas are *not* listed in the index under every possible wording of their associated terms; look first for these diseases in the index under the headings "leukemia" (pages 158-162) and "lymphoma (malignant)" (pages 166-171). Compound morphology terms may be listed in the index with only one order of terms, but the reverse order of terms is also implied. For example, "fibromyxosarcoma" appears in the index, but "myxofibrosarcoma" does not; the same code would be applied to both terms.

The histology is represented by a five-digit code consisting of two parts: the Histologic Type (4 characters) and the Behavior code (1 character). (Behavior is discussed on pages 84-88.) The MCR uses WHO (ICD-O) rules for coding morphologies.

If a reportable histologic term is listed in ICD-O-3 followed by the notation "[obs]" (obsolete), that term may still be used and coded.

When coding Histologic Type from a pathology report, use the best information from the *entire* report (microscopic description, final diagnosis, comments). Specific cytogenetic data may take precedence over other terms for hematologic malignancies. For example, many separate codes are assigned to acute myeloid leukemias having different cytogenetic abnormalities.

## Cross-Indexed Lymphomas / Leukemias

Some lymphomas and leukemias are understood to be the same disease presenting differently at different stages of development. In ICD-O-3 these diseases are listed with separate codes and different terms, but they have cross-referencing notes saying "(see also M-9###/3)". The assignment of Histology (and Primary Site) for these cases will be important for central registries trying to group cases.

If one of these diseases is diagnosed only in the blood or bone marrow, assign the leukemia morphology (and Primary Site C42.1, bone marrow).

If one of these diseases is diagnosed only in any other tissue, assign the lymphoma morphology (and Primary Site corresponding to the involved tissue -- usually lymph nodes, lymphatic structures or other lymph tissues).

If one of these diseases is diagnosed in both blood/bone marrow and some other tissue(s), use the lymphoma morphology (and code Primary Site to the non-blood/bone marrow tissue involved).

The order of biopsies is *not* important in deciding which morphology and Primary Site Code to use. For example, if a positive lymph node biopsy is performed first at one facility, and then a bone marrow biopsy at another facility also finds the disease there, the third category above would apply. Therefore, obtaining diagnostic information from all facilities involved in the work-up of these cases may be especially important.

The cross-referenced ICD-O-3 lymphomas/leukemias (using just the "preferred" terms) are:

| | | |
|---|---|---|
| | 9670/3 | malignant lymphoma, small B lymphocytic, NOS |
| and | 9823/3 | B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (C42.1) |
| | 9687/3 | Burkitt lymphoma, NOS |
| and | 9826/3 | Burkitt cell leukemia (C42.1) |
| | 9727/3 | precursor cell lymphoblastic lymphoma, NOS |
| and | 9835/3 | precursor cell lymphoblastic leukemia, NOS (C42.1) |
| | 9728/3 | precursor B-cell lymphoblastic lymphoma |
| and | 9836/3 | precursor B-cell lymphoblastic leukemia (C42.1) |
| | 9729/3 | precursor T-cell lymphoblastic lymphoma |
| and | 9837/3 | precursor T-cell lymphoblastic leukemia (C42.1) |

The following terms and codes are also cross-referenced in ICD-O-3:

9671/3 malignant lymphoma, lymphoplasmacytic
and 9761/3 Waldenstrom macroglobulinemia (C42.0)

Assign 9761 if diagnosed only in blood; assign 9671 if diagnosed only elsewhere; assign 9671 if both blood and other tissue are involved.

9675/3 malignant lymphoma, mixed small and large cell, diffuse [obsolete term]
and 9690/3 follicular lymphoma, NOS

If these two diagnoses are made within two months of each other, assign 9690. Differences in primary site and involved tissues do not matter for this pair.

9861/3 acute myeloid leukemia, NOS (FAB or WHO type not specified) (C42.1)
and 9930/3 myeloid sarcoma

Assign 9861 if diagnosed only in bone marrow; assign 9930 if diagnosed only elsewhere; assign 9930 if both bone marrow and other tissue are involved.

**General Rule**: Before coding Histologic Type, a determination should be made as to whether the case involves a single primary or multiple primaries. (See pages 14-27 for a detailed discussion.) *All* pathology reports for the primary under consideration should be used. Although the report from the most representative tissue is usually the best, sometimes all of the cancerous tissue may be removed at biopsy; in such cases, the biopsy report must be used. If a definitive statement of a more specific histologic type is found in the microscopic description or in the comments, the more specific histologic diagnosis should be coded; in ICD-O-3, this is *not necessarily* the higher code number.

When coding histology, also use the following rules.

Single Lesion, Multiple Histologies, Same Behavior: If two histologic types or subtypes in the same primary tumor have the same Behavior Code, proceed in the following order to select the appropriate Histologic Type Code:

1. Use a combination code, if one exists. ICD-O-3 contains *many* codes for describing single tumors containing multiple histologic types.

   *Examples*:

   - Invasive breast carcinoma, predominately lobular with foci of ductal carcinoma -
     Use the combination code for infiltrating duct and lobular carcinoma (**8522**/3).
   - Predominately giant cell carcinoma with a spindle cell component -
     Use the combination code for giant cell and spindle cell carcinoma (**8030**/3).

2. If there is no combination code for the histologies reported, compare the specificity of the terms. If one histologic term appears in ICD-O-3 as a non-specific "NOS term" (e.g., "carcinoma, NOS") and the other term is more specific, use the more specific term.

   *Examples:*

   - Adenocarcinoma (8140/3) with mucin-producing features -
     Code to mucin-producing adenocarcinoma (**8481**/3).
   - Invasive carcinoma, probably squamous cell type -
     Code to squamous cell carcinoma (**8070**/3) since this is more specific than invasive "carcinoma, NOS" (8010/3).

3. Code the histology of the majority of the tumor if there is no combination code and if neither term is equivalent to an "NOS term" in ICD-O-3. (The phrases "*predominately...*" and "*...with features of...*" are examples of phrases used to specify the majority of the tumor. Examples of phrases which do not describe the majority of the tumor are "*...with foci of...*", "*...areas of...*", and "*...elements of...*"; but such phrases are to be ignored when both terms are specific and no combination code exists.)

   *Example:* predominately leiomyosarcoma (8890/3) associated with foci of well-developed chondrosarcoma (9220/3) - Code the histology of the majority of the tumor -- **8890**/3. (The "NOS" in the terms for 8890/3 and 9220/3 are attached to *specific* histologies.)

4. If the three situations above do not apply, code the term that has the higher code number in ICD-O-3. Note that this is the easiest rule to remember, but it's the last choice you should make! This rule only applies to single solid tumors. This rule does not apply to hematologic diseases (9590-9989) because within this code range the higher code number is not necessarily the more specific histology. For 9590-9989, assign the code of the more specific term.

   *Examples:* adenosquamous carcinoma (8560/3) and mixed small cell carcinoma (8045/3) - Code as adenosquamous carcinoma (**8560**/3).

   same disease described as mantle cell lymphoma (9673/3) and diffuse large B-cell lymphoma (9680/3) - Code as **9673**/3 because mantle cell lymphoma is more specific.

Single Lesion, Multiple Histologies, Different Behaviors: If the ICD-O-3 Behavior Codes are different, select the morphology code with the higher Behavior Code number.

*Example:* squamous cell carcinoma *in situ* (8070/2) and papillary squamous cell carcinoma (8052/3) - Code as papillary squamous cell carcinoma (**8052**/3).

*Exception*: If the histology of the invasive component is a non-specific "NOS term" (e.g., carcinoma, adenocarcinoma, melanoma), and the noninvasive component has a more specific term enter an invasive Behavior Code with the more specific Histologic Type.

*Example:* squamous cell carcinoma *in situ* (8070/2) with areas of invasive carcinoma (8010/3) - Code as squamous cell carcinoma (**8070**/3).

Multiple Lesions (with multiple histologies) Considered a Single Primary: When multiple tumors are considered a single primary, use the following rules:

1. If one lesion is described with a non-specific "NOS term" (e.g., carcinoma, adenocarcinoma, sarcoma), and the other lesion is described with a more specific term (e.g., *large cell* carcinoma, *mucinous* adenocarcinoma, *spindle cell* sarcoma), code to the more specific term.

2. Some colon and rectum primaries are an exception to the above rule:

   When both an adenocarcinoma (8140/3) and an adenocarcinoma (*in situ* or invasive) in an adenomatous polyp (8210) or an adenocarcinoma (*in situ* or invasive) in (tubulo)villous adenoma (8261, 8263) arise in the same segment of the colon or rectum, code as adenocarcinoma, NOS (**8140**/3) rather than the more specific histology.

   When both a carcinoma (8010/3) and a carcinoma (*in situ* or invasive) in an (adenomatous) polyp (8210) arise in the same segment of the colon or of the rectum, code as carcinoma, NOS (**8010**/3) rather than the more specific histology.

3. If the histologies of multiple lesions can be represented by a combination code [e.g., a lobular carcinoma (8520/3) and a mucinous carcinoma (8480/3)], use that combination code (**8524**/3).

| ICD-O-2 Behavior Code | NAACCR Version 9.1 field "Behavior (92-00) ICD-O-2", Item 430, column 236 |
|---|---|

Refer to the Third Edition of this manual for coding diagnoses made before 2001.

ICD-O-3 Behavior Code — NAACCR Version 9.1 field "Behavior Code ICD-O-3", Item 523, column 257

The fifth digit of the ICD-O-3 morphology code (after the slash) is the Behavior Code. Use the best information available from the entire pathology report to code behavior.

The MCR requires that all cancers with a Behavior Code of **2** or **3** be reported. If a histology appears in ICD-O-3 with *only* a Behavior Code of **0** or **1** but a pathologist has described the cancer as "malignant", you may change the Behavior Code to **3** and report the case (for example, a confirmed "malignant tumorlet" would be reportable as 8040/**3**). (See "Rule F" on pages 20 and 29 of ICD-O-3.) As also noted on page 9 in this MCR Manual, the following are MCR reportability exceptions:

| Morphology | |
|---|---|
| 8000-8005 | malignant neoplasms, NOS, of the skin (C44.0-C44.9) |
| 8010-8046 | epithelial carcinomas of the skin (C44.0-C44.9) |
| 8050-8084 | papillary and squamous cell carcinomas of the skin (C44.0-C44.9) |
| 8090-8110 | basal cell carcinomas of any site except genital sites |

*Note*: The above lesions are reportable for skin of the genital sites -- vagina, clitoris, vulva, prepuce, penis, and scrotum (C52.9, C51.0-C51.9, C60.0, C60.9, and C63.2).

In addition, the MCR requires that cases with Behavior Codes **0** or **1** of the meninges, brain, and central nervous system (C70._, C71._, and C72._) be reported.*

Beginning with cases diagnosed on or after January 1, 1998, the MCR no longer requires reporting of carcinoma *in situ* of the uterine cervix (C53._ with histologic type codes 8000-8110 and Behavior Code **2**). This includes cases of cervical intraepithelial neoplasia, Grade III (CIN III), pre-invasive cervical neoplasia and squamous intraepithelial lesions. Invasive cervical carcinomas are still reportable.

Beginning with cases diagnosed on or after January 1, 1998, the MCR also no longer requires cases of anal, vaginal or vulvar intraepithelial neoplasia, Grade III (AIN, VAIN, VIN, histology 8077/2), nor prostatic intraepithelial neoplasia, Grade III (PIN, histology 8148/2). (This "Grade III" does not refer to the histopathologic grade/differentiation; it refers to the highest category of dysplasia in the Bethesda system for non-invasive lesions.)**

* Pituitary and pineal glands and craniopharyngeal duct (C75.1-C75.3) are not included in this requirement, even though the Central Brain Tumor Registry of the U.S. collects cases of benign and uncertain behavior for these sites. For primary sites C75.1-C75.3, only report cases with invasive or *in situ* behavior to the MCR.

** Central registries are supposed to continue collecting VAIN III, VIN III and AIN cases, but the MCR has decided against this. At the MCR, it is not easy to tell if cases reported with these descriptors are actually of a high enough severity of dysplasia to be truly coded with a Behavior Code of /2.

The codes for classifying Behavior are shown here:

| **Behavior** | **Code** |
|---|---|
| benign | **0** |
| uncertain whether benign or malignant<br>*borderline malignancy<br>*low malignant potential<br>*uncertain malignant potential | **1** |
| carcinoma *in situ*<br>intraepithelial<br>non-infiltrating<br>non-invasive | **2** |
| malignant, primary site | **3** |
| malignant, metastatic site<br>malignant, secondary site | ** 6 |
| malignant, uncertain whether primary or metastatic site | ** 9 |

* but pilocytic astrocytomas (9421/1) are coded as if malignant (**3**)

** This is a reportable behavior, but enter code **3** for the MCR. Behavior Code "6" indicates a metastatic site. If the only specimen is from a metastatic site, code the histologic type of the metastatic site but enter **3** for Behavior Code.

*Example*: The patient had a biopsy of the liver showing metastatic adenocarcinoma (8140), and the primary site is unknown (C80.9). Code the histology as adenocarcinoma (8140/**3**).

Each of these Behavior Codes appears in ICD-O-3 next to varying number of histology codes:
about 290 histology codes appear with a /**0** benign behavior;
about 150 histology codes appear with a /**1** uncertain behavior;
only 30 histology codes appear with a /**2** *in situ* behavior;
about 550 histology codes appear with a /**3** malignant behavior;
only 6 codes appear with a /**6** metastatic behavior (8000, 8010, 8070, 8140, 8480, 8490);
only 3 codes appear with a /**9** primary/secondary uncertainty behavior (8000, 8010, 8800).

Remember that the Behavior Code which appears next to a histologic type code in ICD-O-3 may always be changed to reflect the true behavior of the cancer; thus, for example, not every histology which could be found metastatically in the body is shown with a /6.

***In Situ*** -- The following terms indicate *in situ* /**2** behavior (ICD-O-3):

- adenocarcinoma in an adenomatous polyp with no invasion of stalk (8210/2)
- Bowen disease (8081/2) (C44._)
- Clark's Level 1 for melanoma, limited to epithelium (8720/2)
- comedocarcinoma, noninfiltrating (8501/2) (C50._)
- confined to epithelium
- glandular intraepithelial neoplasia, grade III (8148/2)**
- Hutchinson melanotic freckle, NOS (8742/2) (C44._)
- intracystic, noninfiltrating (for example, a carcinoma 8504/2)
- intraductal*
- intraepidermal, NOS (except intraepidermal epithelioma of Jadassohn 8096/0; intraepidermal nevus 8740/0)
- intraepithelial, NOS
- intratubular malignant germ cells; intratubular germ cell neoplasia (9064/2) (C62._)
- involvement up to but not including the basement membrane
- lentigo maligna (8742/2) (C44._)
- lobular neoplasia (C50._)
- lobular, noninfiltrating (C50._)
- noninfiltrating
- noninvasive
- no stromal involvement (except squamous cell carcinoma in situ with questionable stromal invasion 8076/2)
- papillary, noninfiltrating or intraductal
- precancerous melanosis (8741/2) (C44._)
- Queyrat erythroplasia (8080/2) (C60._)
- Sertoli-Leydig cell tumor of intermediate differentiation (8631/2)
- squamous intraepithelial neoplasia, grade III (8077/2) [lower-grade (< grade III) neoplasias do not warrant the use of /2]
- Stage 0

* except in these terms:

8453/0 intraductal papillary-mucinous adenoma (C25._)
8453/1 intraductal papillary-mucinous tumor with moderate dysplasia (C25._)
8453/3 intraductal papillary-mucinous carcinoma, invasive (C25._)
8503/0 intraductal papilloma
8503/3 intraductal papillary adenocarcinoma with invasion (C50._)
8505/0 intraductal papillomatosis, NOS; diffuse intraductal papillomatosis
8543/3 Paget disease and intraductal carcinoma of breast (C50._)

## Microinvasion

Code microinvasion (the earliest stage of invasion) as malignant (**3**), not *in situ.* For the diagnosis "microinvasive squamous cell carcinoma" (a common form of cervical cancer), use the morphology code provided by ICD-O-3 (8076/3).

## Malignant Terms

Forms of the terms "invasive", "leukemia", "malignant" and "metastatic" are generally synonymous with Behavior Code **3** (or /6 reported as /**3**). The following terms are exceptions: metastasizing leiomyoma (8898/1); invasive hydatidiform mole or invasive mole, NOS (9100/1) (C58.9); and T-cell large granular lymphocytic leukemia (9831/1).

## Behavior and Staging Differences

It may be difficult in medical records to distinguish a description of a tumor's behavior from a description of its stage. The term "*in situ*", for example, could be describing behavior, extent of disease, or both. The Behavior Code collected by the MCR reflects the WHO (ICD-O-3) behavior of the disease. The behavior of a case as reflected in its staging codes may differ. For example, mammary Paget disease with no underlying tumor found (8540/**3**) is AJCC-staged as *in situ* disease; mammary Paget disease with an underlying intraductal carcinoma (8543/**3**) is also AJCC-staged as *in situ* disease; the *in situ* staging and Behavior Code **3** are compatible for these cases, and it is the ICD-O behavior /**3** that is collected. If a pathologist specifically describes "Paget disease, *in situ*" and wants the *ICD-O Behavior* coded as /**2**, then that is permissible under the ICD-O "matrix" rule ("Rule F" on pp. 20 and 29-30 in ICD-O-3), but this is not the same as a physician describing the AJCC *staging* of Paget disease as *in situ.* If the behavior is unclear or not stated in the record, use the default ICD-O-3 Behavior code.

ICD-O-3 Conversion Flag

NAACCR Version 9.1 Item 2116, column 1020

This coded field describes the origin of the ICD-O-3 codes (Histologic Type Code and Behavior Code) within a case record. Your data system may fill this field automatically, but you should also be able to change this field manually when appropriate (as when you have visually reviewed and corrected an automatic code conversion). It is impossible for us to describe exactly how each hospital data system may be handling the ICD-O-2 and ICD-O-3 fields. The codes* for the ICD-O-3 Conversion Flag follow:

| **Conversion Circumstances** | **Code** |
|---|---|
| No conversion took place. (ICD-O-3 fields are empty.) | **leave empty** |
| Case was originally coded in ICD-O-3. | **0** |
| Case was coded in ICD-O-2; ICD-O-3 fields were filled automatically by conversion program; the ICD-O-3 codes have not been reviewed by a registrar. | **1** |
| As for code **1**, but a registrar has reviewed the ICD-O-3 codes. | **3** |

* Codes **2** and **4** are also allowed, although they are not applicable because they refer to non-existent primary site code conversions between ICD-O-2 and ICD-O-3.

Grade / Differentiation / Immunophenotype Code

NAACCR Version 9.1 field "Grade", Item 440, column 237

The Grade or Differentiation of a tumor describes the tumor's resemblance to normal tissue. A well differentiated (Grade I) tumor is the most like normal tissue. The immunophenotype of a lymphoma or leukemia describes the type of cell in which the disease developed.

## Grade / Differentiation

The MCR uses WHO (ICD-O)/ROADS Manual rules for assigning Grade as the sixth digit of the ICD-O morphology code -- not AJCC rules. In the *AJCC Cancer Staging Manual, 5th Edition* there are rules for assigning a "grade" code of "G1", "G2", "G3", "G4" or "G3-4"; but these are AJCC staging-related grade codes, and are not the same type of Grade code collected by the MCR and described on page 67 of ICD-O-3 or pages 111-113 of the ROADS.

*Examples*: The *AJCC Cancer Staging Manual, 5th Ed*. grade for prostate cancer with Gleason score 7 is code "G3-4"; the Grade reported to the MCR is **2** (see p. 93 in this MCR manual, or p. 113 in the ROADS).

On p. 8 of the *AJCC Cancer Staging Manual, 5th Ed*., certain histologies are always "by definition ... G4" (undifferentiated carcinoma, small cell carcinoma, large cell carcinoma of lung, Ewing sarcoma of bone and soft tissue, and rhabdomyosarcoma of soft tissue). These morphologies should be reported to the MCR with the Grade that is indicated in the medical record. That is, a "poorly differentiated small cell carcinoma" would have Grade code **3**; the same diagnosis with no indication of Differentiation would have Grade code **9**.

The term "grade" in a medical record does *not* always describe a tumor's differentiation and thus should *not* always be coded here. It can be confusing. For example, in describing some diseases, pathologists use "grade" as a synonym for "type" or "category" (as in different "grades" of nodular sclerosing Hodgkin lymphoma, follicular lymphoma, or intraepithelial neoplasia). The word "differentiation" is a more reliable indicator of the morphology code's sixth digit Grade that we collect (as in "poorly differentiated lymphocytic lymphoma", code **3**). Terms like "high grade" or "low grade", when describing lymphomas or leukemias, are *not* coded in this field, but if a histologic term is listed in ICD-O-3 with the words "high grade" or "low grade" incorporated into the term (as in 8931/3, "endometrial stromal sarcoma, low grade"), then that *should* be coded here (code **2** for low grade, **4** for high grade).

A "nuclear" grade may be recorded in the medical record (often for breast and renal cancers, as in Fuhrman or Van Nuys nuclear grades.) Rather than characterizing the whole tumor, nuclear grade only describes cell nuclei activity within the tumor. Nuclear grades are not considered completely comparable with the "sixth digit" ICD-O Grade field collected by the MCR, so do not code nuclear grades here.

A Grade recorded in a histopathology report takes precedence over one in a cytology report. Code the Grade or Differentiation as stated in the final pathologic diagnosis.

*Example*: Microscopic Description: moderately differentiated squamous cell carcinoma with poorly differentiated areas

Final Pathologic Diagnosis: moderately differentiated squamous cell carcinoma

Code moderately differentiated (**2**).

***Exception***: If the Differentiation is NOT stated in the final pathologic diagnosis, use the information from the microscopic description or comments.

Code the Grade or Differentiation from the pathologic examination of the *primary* tumor only -- not from metastatic sites (because cells at a metastatic site may have a different amount of Differentiation than those in the primary site). If the primary site is unknown, always code the Grade/Differentiation as unknown (**9**).

*Example*: A metastatic liver lesion is specified as "poorly differentiated carcinoma", and the primary site cannot be identified. Enter code **9** for Grade because the Differentiation *at the primary site* cannot be determined.

When the pathology report(s) list(s) more than one Grade, code to the highest Grade code given, even if it does not represent the majority of the lesion. This may result from different degrees of Differentiation between biopsy and resection specimens.

*Examples*:

- moderately to poorly differentiated carcinoma - Code as poorly differentiated (**3**).
- combination of Grades I and II carcinoma - Code as moderately differentiated (**2**).
- predominantly Grade I, focally Grade II - Code as Grade II (**2**).

Code the Grade for *in situ* lesions if available. Because this is not usually considered to be of importance in *in situ* cases, Grade is seldom recorded; but do not automatically make the Grade **9** if a degree of Differentiation *is* specified for an *in situ* case.

Grade / Immunophenotype

Codes **5**, **6, 7** and **8** define cell origins for leukemias and lymphomas. For these types of cancer, cell classifications have precedence over grades or differentiation (i.e., a "poorly differentiated T-cell lymphoma" should have code **5** for the immunophenotype rather than **3** for the differentiation). Do NOT use "high grade," "low grade," or "intermediate grade" descriptions of lymphomas as a basis for coding this field.

In ICD-O-3, "the cell lineage is implicit in the four-digit morphology code" (see page 14 in ICD-O-3). Some *terms* in ICD-O-3 have an implied cell type origin; but note that not *all* terms listed with the same morphology code in ICD-O-3 necessarily should be coded with the same immunophenotype. For example, the preferred term for 9680/3 is "malignant lymphoma, large B-cell, diffuse, NOS", but not all of the synonyms and equivalent terms also listed for that code should necessarily be coded with B-cell origin. If the medical record does *not* indicate an immunophenotype, use code **9**.

The Grade/Differentiation/Immunophenotype codes are as follows:

| **Description** | **Grade/Cell Type** | **Code** |
|---|---|---|
| well differentiated<br>differentiated, NOS | Grade I | **1** |
| moderately differentiated<br>moderately well differentiated<br>intermediate differentiation | Grade II | **2** |
| poorly differentiated<br>dedifferentiated | Grade III | **3** |
| undifferentiated<br>anaplastic | Grade IV | **4** |
| for lymphomas and leukemias: T-cell, T-precursor | T-cell origin | **5** |
| for lymphomas and leukemias:<br>B-cell, Pre-B, B-precursor | B-cell origin | **6** |
| for lymphomas and leukemias: null cell, non T-non B | Null cell origin | **7** |
| for lymphomas and leukemias: NK cell | Natural killer cell origin | **8** |
| grade/differentiation/cell type not determined,<br>not stated, not applicable;<br>unknown primary site;<br>non-malignant disease (Behaviors /0, /1) | unknown | **9** |

## MRI / PET / Brain Tumor Grading

It may be possible to establish tumor Grade through magnetic resonance imaging (MRI) or positron emission tomography (PET) when there is no tissue diagnosis. (Brain tumors may be graded using these methods.) If there is *no* tissue diagnosis, but the Grade or Differentiation is indicated on an MRI or PET report, use that Grade; if there *is* a tissue diagnosis, however, do not use the Grade from any other source. Note that only malignancies (behaviors /2, /3) are Graded -- for benign disease and tumors of uncertain behavior (/0, /1), assign code **9**.

WHO developed a malignancy scale for central nervous system tumors that includes a "WHO grade" (of I, II, II-III, III, III-IV or IV). See the explanation and Table 27 on pages 39-40 of ICD-O-3. This "WHO grade" is not coded in the ICD-O Grade field that we collect. For example, an anaplastic meningioma has a "WHO grade" III but would be coded **4** in the ICD-O Grade field because of the term "anaplastic". If a brain/CNS tumor is described only by its "WHO grade", it should be assigned ICD-O Grade code **9**. Look for terminology in the medical record that is describing the tumor's ICD-O Grade, such as the terms shown in the table below.

## Other Grade/Differentiation Terminology

When there is variation in the usual terms for Grade or Differentiation, use the following conversions:

| Terminology | Grade | Code |
|---|---|---|
| low grade<br>partially well differentiated | I-II | **2** |
| medium grade<br>intermediate grade | II-III | **3** |
| moderately undifferentiated<br>relatively undifferentiated | III | **3** |
| high grade | III-IV | **4** |

A Grade may be recorded as "2/3" (Grade II in a three-grade system) or "II/IV" (Grade II of a four-grade system). For these classifications, use the following codes:

| Grade | Code |
|---|---|
| I / III | **2** |
| II / III | **3** |
| III / III | **4** |

| Grade | Code |
|---|---|
| I / IV | **1** |
| II / IV | **2** |
| III / IV | **3** |
| IV / IV | **4** |

**Breast Tumors and Scarff Bloom-Richardson Grading**

The Differentiation of a breast tumor may be described using the Scarff Bloom-Richardson (SBR or BR) grading system. (This grading system may also be called Bloom-Richardson, modified Bloom-Richardson, Elston-Ellis modification of Bloom-Richardson, Nottingham grade, or Nottingham modification of Bloom-Richardson.) Use the following codes:

| Bloom-Richardson Score | Bloom-Richardson Grade | Differentiation | Code |
|---|---|---|---|
| 3, 4, 5 | low grade | well differentiated | **1** |
| 6, 7 | intermediate grade | moderately differentiated | **2** |
| 8, 9 | high grade | poorly differentiated | **3** |

**Prostate Tumors and Gleason's Score or Pattern**

Both the tumor Differentiation and Gleason's Score and/or Pattern may be given. Code the tumor Grade/Differentiation when it is available, but use the following conversions when you have only the Gleason's Score (2-10):

| Gleason's Score | Grade and Differentiation | Code |
|---|---|---|
| 2, 3, 4 | I well differentiated | **1** |
| 5, 6, 7 | II moderately differentiated | **2** |
| 8, 9, 10 | III poorly differentiated | **3** |

If only the predominate pattern (1-5) is mentioned, use the following conversions:

| Gleason's Pattern | Grade and Differentiation | Code |
|---|---|---|
| 1, 2 | I well differentiated | **1** |
| 3 | II moderately | **2** |
| 4, 5 | III poorly differentiated | **3** |

## Narrative Histology / Behavior / Grade

NAACCR Version 9.1 field "Text--Histology Title", Item 2590, columns 3407-3446

Enter the histology, behavior and grade/differentiation/immunophenotype in narrative form, using up to 40 characters. If you run out of room, continue the text in another Narrative field.

Do not use an automatic text label to complete this field; instead, this field should contain histology, behavior and grade/differentiation information as derived from the medical record. The information in this field is used to verify the Histologic Type, Behavior and Grade Codes.

Information regarding histology, behavior and grade is primarily found in the pathology report. Use the most specific and accurate information. If the medical record contains conflicting information regarding histology, behavior or grade, information in the pathology report should take precedence. If histology, behavior or grade is still unclear, a physician should be consulted. If the diagnosis you are documenting here was uncertain or doubtful, indicate this here (space permitting) or in the Comments/Narrative Remarks field.

If the combination of primary site and morphology is unusual enough to trip an automatic edit, include a note that this unusual combination has been verified by you as correct, and note how you verified it. These remarks could be in this field, the Primary Site Narrative, or the Comments/Narrative Remarks field.

## Date of Diagnosis

NAACCR Version 9.1 Item 390, columns 219-226

Enter the date, in MMDDCCYY format, on which a recognized medical practitioner first stated that the patient had the reported cancer, whether or not the diagnosis was ever histologically confirmed, and whether or not the diagnosis was made at the reporting hospital or before admission there.

Use **9**'s to code unknown parts of the date (such as 06**99**2001 or **9999**2001).

For a diagnosis made *in utero*, use the eventual date of birth as the Date of Diagnosis.

For cases of Class 5 (first diagnosed at autopsy), enter the date of death as the Date of Diagnosis, even if the autopsy was actually performed on a later date.

If a patient receives cancer-directed therapy before definitive diagnosis, use the date on which therapy started as the Date of Diagnosis.

Do not change the Date of Diagnosis if the diagnosis was confirmed at a later date.

*Example*: A patient has a mammogram on September 15, 2001, revealing a mass in the lower inner quadrant "compatible with carcinoma". On September 22 the patient has an excisional biopsy that confirms infiltrating duct carcinoma. The Date of Diagnosis is **09152001**.

If, however, a physician reports that, in retrospect, a patient had cancer at an earlier date, use that earlier date as the Date of Diagnosis (i.e., backdate the diagnosis).

*Example*: In June of 1999, a patient has a total abdominal hysterectomy for endometriosis. The patient is admitted in October of 2001 with abdominal pain and distension. A laparoscopy with omental biopsy reveals metastatic cystadenocarcinoma. A review of the 1999 hysterectomy shows an area of cystadenocarcinoma in the left ovary. Backdate the diagnosis to June 1999. (Enter **06991999**.) Cystadenocarcinomas diagnosed in 1999 are reportable to the MCR.

**Vague Dates**

Estimate the Date of Diagnosis if you do not know the exact date, and mention in the Comments/Narrative Remarks that the date reported is an estimate. Approximation is preferable to entering an unknown date. The MCR cannot determine if a particular case is reportable to us without at least a year of diagnosis being estimated. Use the following procedures if information is limited to descriptive terms:

| **Descriptive Term** | **Date Coded** |
|---|---|
| spring | April |
| middle of the year | July |
| fall / autumn | October |
| winter | Try to determine if this means the beginning or end of the year, and then code January or December. |

Class of Case

NAACCR Version 9.1 Item

Class of Case divides registry data into analytic and nonanalytic categories. Analytic cases (**0**, **1**, **2**) are those included on treatment and survival analyses. Nonanalytic cases (**3**, **4**, **5**, **6**, **8**, **9**) are those that are not included in treatment and survival analyses. The code **6** became valid for the MCR for diagnoses made as of 1996; the ACoS requirements pertaining to Class 6 cases have undergone perpetual revision since that time; they are now considered nonanalytic (for diagnoses made in 2000 and thereafter). The MCR requires hospitals to report nonanalytic cases (Class 6 cases are optional), but only in an abbreviated fashion (see page 7).

| Code | Class | Description |
|---|---|---|
| **0** | Class 0 | First diagnosed at reporting institution since its reference date, and all of the first course of therapy given elsewhere. Cases include:<br>• patients who choose to be treated elsewhere<br>• patients who are referred elsewhere for treatment for any reason (e.g., lack of special equipment, proximity of a patient's residence to the treatment center, or financial, social or rehabilitative considerations) |
| **1** | Class 1 | First diagnosed at reporting institution since its reference date, and either (a) received all or part of the first course of therapy at the reporting institution, or (b) was never treated. Cases include:<br>• patients who received all or part of their first course of therapy at the reporting institution<br>• patients who refused any treatment<br>• patients who were untreatable because of age, advanced disease or other medical conditions<br>• Specific treatment was recommended but not received at the reporting institution, and it is unknown if treatment was ever administered.<br>• It is unknown if treatment was recommended or administered.<br>• patients diagnosed at the reporting institution prior to the reporting institution's reference date, and all or part of the first course of therapy was received at the reporting institution after the reporting institution's reference date<br>• patients who were first diagnosed and had staging workup at the reporting institution, and all or part of the first course of therapy was received in a staff physician's office.<br>• patients who were first diagnosed in a staff physician's office and then treated at the reporting institution<br>• patients who were diagnosed and whose treatment was planned at the reporting institution, and treatment was delivered elsewhere in accordance with the reporting institution's treatment plan |

| Code | Class | Description |
|---|---|---|
| **2** | Class 2 | First diagnosed elsewhere, and either (a) received all or part of the first course of therapy at the reporting hospital after its reference date, or (b) planning of the first course of therapy was done primarily at the reporting hospital. Cases include:<br>• patients diagnosed at another hospital but not treated until admission to the reporting hospital, regardless of the interval between diagnosis and treatment<br>• patients diagnosed and surgically treated at another hospital, then admitted to the reporting hospital for radiation therapy that completes planned first course of treatment<br>• any cases the reporting hospital considered to be analytic (i.e., the planning/-management decisions were made at the hospital, even if treatment was administered elsewhere, and the follow-up care is the responsibility of the reporting hospital) |
| **3** | Class 3 | First diagnosed at another institution, and either (a) entire first course of therapy was given elsewhere, (b) patient was never treated, or (c) unknown if treated. Cases include:<br>• patients diagnosed and first course of therapy completed elsewhere, later admitted to the reporting hospital with disease<br>• no information available on patient's first course of therapy, and patient is now treated or managed at the reporting institution<br>• The reporting institution is treating or managing the recurrence, progression, or subsequent treatment of a previously diagnosed malignancy.<br>*Note*: Class 3 cases are <u>not reportable</u> to the MCR if originally <u>diagnosed before 1995</u>. |
| **4** | Class 4 | First diagnosed and first course of therapy at reporting institution before its reference date. Cases include:<br>• Cases whereby the reporting facility manages or treats a recurrence or progression of the disease <u>after</u> the facility's reference date.<br>*Note*: Class 4 cases are reportable to the MCR <u>only</u> if the reporting institution's reference date is later than the MCR's reference date of January 1, 1982. |
| **5** | Class 5 | First diagnosed at autopsy. Cases include:<br>• incidental finding of cancer at autopsy |
| **6** | Class 6 | Patients who were diagnosed and received all of first course of treatment in a staff physician's office.<br>*Note:* This extends only to members of your institution's medical staff. If a physician holds multiple staff appointments, s/he must assign reporting responsibility to one institution.<br>*Note*: Class 6 cases are not required for the MCR, but <u>if your facility collects</u> them we <u>do</u> want them to be reported as for any nonanalytic case. Any Class 6 case originally <u>diagnosed before 1996</u> is <u>not reportable</u> to the MCR. |
| **8** | Class 8 | By death certificate only. <u>This code is for MCR use only</u>. Cases include:<br>• Diagnoses based on death certificates only. |
| **9** | Class 9 | Unknown. Cases include:<br>• unknown if previously diagnosed or treated<br>• previously diagnosed, but date unknown |

## Institution Referred From

NAACCR Version 9.1 Item 2410, columns 1697-1711

This coded field helps the MCR understand the interactions a patient has had with multiple facilities and where we could look for further information we might need about a case.

This field records where a patient was diagnosed or received any initial treatment for this case before being seen at your facility. If you know that a patient was seen at another facility for this case prior to your contact with the patient, please report that information even if the patient did not have a *formal referral* to your hospital. If a patient was seen at more than one facility before yours, record just the hospital where s/he was seen most recently before your facility.

If this case was diagnosed at your facility, was seen first at your facility, or has been seen only at your facility (cases of Class 0, 1, 4, 5), this field may be left empty (or may be filled with zeroes).

This field should contain a ACoS/COC Facility Identification Number (FIN), but the special code assigned to a Massachusetts facility by the MCR (usually four digits) is also acceptable if your data system can produce it. See page 32 and Appendix G for FINs and MCR codes.

For patients previously seen at a U.S. facility outside Massachusetts, this field should contain a FIN. [The ACoS website (http://web.facs.org/cpm) has a "search feature" for FIN codes of facilities with approved cancer programs.] If you know that the patient came to you from another state but you can't identify or code the particular institution, please enter the other state's central registry code number (see Appendix G for these codes).

If you know that a patient was referred to your hospital but you cannot identify that facility (or its code number), fill this field with **9**'s. This includes patients coming to you from a facility in a foreign country or a physician office/private practice.

If the facility a patient was referred from is now closed or no longer seeing cancer patients, there may still be a code for the facility in Appendix G that you may fill in here.

## Institution Referred To

NAACCR Version 9.1 Item 2420, columns 1712-1726

This coded field helps the MCR understand the interactions a patient has had with multiple facilities and where we could look for further information we might need about a case.

This field records where a patient was referred by your facility for this case. This does not include just *formal referrals*; if you know that the patient was seen elsewhere after being seen at your hospital, code that facility. If the patient went to multiple facilities after yours, code just the one to which s/he went most immediately after yours.

For patients not being seen later at any other facility (cases of Class 1, 3, 4, 5), this field may be left empty (or may be filled with zeroes).

This field should contain a ACoS/COC Facility Identification Number (FIN), but the special code assigned to a Massachusetts facility by the MCR (usually four digits) is also acceptable if your data system can produce it. See page 32 and Appendix G for FINs and MCR codes.

For patients seen later at a U.S. facility outside Massachusetts, this field should contain a FIN. [The ACoS website (http://web.facs.org/cpm) has a "search feature" for FIN codes of facilities with approved cancer programs.] If you know that the patient is going to another state but you can't identify or code the particular institution, please enter the other state's central registry code number (see Appendix G for these codes).

If you know that a patient was referred elsewhere but you cannot identify that facility (or its code number), fill this field with **9**'s. This includes patients going to a facility in a foreign country or a physician office/private practice.

If the facility a patient was referred to is now closed or no longer seeing cancer patients, there may still be a code for the facility in Appendix G that you may fill in here.

EOD -- Tumor Size

NAACCR Version 9.1 Item 780, columns 390-392

The MCR has adopted the SEER Extent of Disease rules for coding Tumor Size, with the following exceptions:

- For Hodgkin and non-Hodgkin lymphomas (9590-9699, 9702-9719) and Kaposi sarcoma (9140), SEER uses this field to record a patient's HIV or AIDS status; do NOT record this for the MCR. Record **999** for lymphomas and the actual Tumor Size for Kaposi sarcoma.
- For mycosis fungoides (9700) and Sezary disease (9701) of the penis (except body of penis, C60.2), scrotum, skin and vulva (C60.0, C60.1, C60.8, C60.9, C63.2, C44._, C51._), SEER uses this field to record peripheral blood involvement; do NOT record this for the MCR. Code **999** for these diseases.
- For any Tumor Size < 2 millimeters, SEER uses code **002** because code **001** is reserved by SEER to indicate only a microscopic focus of invasion. The COC uses **001** for microscopic foci, and also for an actual Tumor Size of (or rounded to) 1 mm. The MCR uses the COC rule.

**For All Cases Except Malignant Melanoma of the Skin, Conjunctiva, Penis, Scrotum, or Vulva** (C44._, C69.0, C60.0, C60.1, C60.8, C60.9, C63.2, C51._, 8720-8790)

Use three digits to record the size of the primary tumor *in millimeters*. This is the largest dimension or the diameter of the primary tumor before treatment with radiation, chemotherapy, hormone therapy or immunotherapy.

Enter the size given in the pathology report for surgically excised tumors, unless the patient received treatment (radiation, chemotherapy, hormone therapy, immunotherapy) before the surgery. If neoadjuvant therapy occurred, use pre-treatment clinical Tumor Size information rather than the surgical results. Do not calculate a tumor size by adding the sizes of pieces or chips of tissue as they might not be from the same location or might represent only a small portion of a large tumor. Do not add measurements recorded in biopsy and resection reports. Use the report that documents the largest size. If an excisional biopsy is performed and residual tumor is found during a wider resection, base Tumor Size on the excisional biopsy report alone *unless* the residual tumor is found to be larger than the portion that was excised.

There are times when a pathologic Tumor Size is not available and clinical information must be used. The pathology report may not identify Tumor Size, or the tumor may not have been surgically excised. In these cases, use the Tumor Size documented in the following reports (listed in order of preference): 1. Operative reports; 2. Scans; 3. X-rays; 4. Physical exams.

To convert centimeters to millimeters, move the decimal point one digit to the right (i.e., multiply the number of centimeters by 10).

*Example*: 2.1 centimeters is equivalent to 21 millimeters, so **021** would be entered for Tumor Size.

The following are millimeter equivalents of centimeters and inches:

| | | |
|---|---|---|
| 1.0 mm | = | 0.1 cm |
| 10.0 mm | = | 1.0 cm |
| 1.0 cm | ≈ | 0.394 inch |
| 1.0 inch | ≈ | 2.5 cm |
| 1.0 inch | ≈ | 25.0 mm |

Round off to the nearest millimeter.

*Example*: Tumor size 2.19 cm. This is 21.9 mm, so round to the nearest millimeter and enter **022**.

Code the largest size when a tumor has multiple measurements.

*Examples*:

- Record size as **033** mm for a 2 x 3.3 x 2.5 cm tumor.
- Record size as **045** mm for a 4.5 x 2.0 cm tumor.

Do not use the size of the entire *specimen* for Tumor Size.

*Examples*:

- A patient has an excisional breast biopsy. The pathology report states that the specimen measures 1 cm x 2 cm, but does not state the actual size of the tumor. Do not use the specimen size of 1 cm x 2 cm; rather, code the size based on information from the operative report, mammography, or physical exam.
- A patient has a colonoscopy with polypectomy. The pathology report reads "a 1.5 x .6 cm polyp with a microscopic focus of adenocarcinoma *in situ.*" Enter **001** for Tumor Size because of the term “microscopic” (see **Table IV.2**, pages 102-103).

When a patient has multiple tumors being reported as one primary, record the size of the largest tumor.

*Example*: A patient has a 1 cm nodule in the right upper lobe and a 1.5 cm nodule with the same histology in the right middle lobe. Enter Tumor Size as **015** mm.

When a primary tumor has both *in situ* and invasive components, record the size of the invasive component only. When a primary tumor is completely *in situ* (has no invasive component), record the entire Tumor Size.

*Examples*: The pathology report describes a breast mass consisting of a 1.8 x 1.3 cm intraductal carcinoma, and a 1.1 cm nodule of infiltrating duct carcinoma. Enter Tumor Size as **011** mm.

The only information available is that a 3-cm breast tumor had both non-invasive and invasive components. The size of the invasive component alone is unknown, so record **999**.

The pathology report describes a breast mass consisting of a 1.8 x 1.3 cm intraductal carcinoma. Enter Tumor Size as **018** mm.

**Descriptive Terms**

Physicians sometimes use various terms to describe the size of a tumor instead of giving an actual measurement, especially in clinical descriptions. The following table converts such terms into millimeters.

## Table IV.2

### Millimeter Equivalents of Descriptive Terms

Fruit:

| Object | mm | Object | mm |
|---|---|---|---|
| Apple | **070** | Lemon | **080** |
| Apricot | **040** | Olive | **020** |
| Cherry | **020** | Orange | **090** |
| Date | **040** | Peach | **060** |
| Fig, dried | **040** | Pear | **090** |
| Grape | **020** | Plum | **030** |
| Grapefruit | **100** | Tangerine | **060** |
| Kumquat | **050** | | |

Nuts:

| Object | mm |
|---|---|
| Almond | **030** |
| Chestnut | **040** |
| Chestnut, horse | **040** |
| Hazel nut | **020** |
| Hickory nut | **030** |
| Peanut | **010** |
| Pecan | **030** |
| Walnut | **030** |

Vegetables:

| Object | mm |
|---|---|
| Bean | **010** |
| Lima bean | **020** |
| Pea | **009** |
| Pea, split | **009** |

**Table IV.2 continued**

Eggs and Miscellaneous Foods:

| Object | mm | Object | mm |
|---|---|---|---|
| Doughnut | **090** | Egg, Pigeon | **030** |
| Egg | **050** | Egg, Robin | **020** |
| Egg, bantam | **040** | Lentil | **009** |
| Egg, goose | **070** | Millet | **009** |
| Egg, hen | **030** | | |

Money:

| Object | mm |
|---|---|
| Dime | **010** |
| Dollar, silver | **040** |
| Half dollar | **030** |
| Nickel | **020** |
| Penny | **010** |
| Quarter | **020** |
| Silver Dollar | **040** |

Other:

| Object | mm |
|---|---|
| Ball, golf | **040** |
| Ball, ping-pong | **030** |
| Ball, tennis | **060** |
| Baseball | **070** |
| Eraser, pencil | **009** |
| Fist | **090** |
| Marble | **010** |
| Match head | **009** |
| Microscopic | **001** |
| Pencil eraser | **009** |

Enter code **000** when the primary location of a solid tumor is not found (AJCC T0). Use this code only for solid tumors.

*Example:* A patient has a biopsy of an axillary mass. The pathology report identifies infiltrating duct carcinoma in an axillary node. Workup reveals no breast lesion. Enter Tumor Size **000**.

***Exception***: Enter code **997** for cases of Paget disease of the nipple when no underlying breast tumor can be found.

Use code **009** if an inexact measurement of "less than 1 cm" is given.

Use code **019** if an inexact measurement of "less than 2 cm" is given.

If only an inexact estimate involving a size range is available, code the larger size mentioned. For example, if "3 to 4 cm" is the best information you have, code **040**.

Enter code **998** for Tumor Size when the following terms describe the tumor involvement at these sites:

- Esophagus (C15._): "entire circumference"
- Stomach (C16._): "diffuse"; "widespread"; "3/4 or more"; "linitis plastica"
- Colon/rectosigmoid junction/rectum (C18.0-C20.9): familial/multiple polyposis (Histologic Type Code 8220 or 8221 with a Behavior Code of 2 or 3)
- Lung (C34._): "diffuse"; "entire lobe of lung"
- Breast (C50._): "diffuse"; "widespread"; "3/4 or more"; "inflammatory carcinoma"

Enter code **999** in the following circumstances:

- when Tumor Size is not recorded or not available
- when the pathologic report gives no Tumor Size and there is no clinical Tumor Size information (for example, the primary tumor was not palpable on physical examination and could be not seen by imaging techniques)
- when transurethral resections of the prostate or bladder have produced chips and fragments of tissue (Do not estimate Tumor Size by adding the sizes of these chips or fragments together.) If a clinical Tumor Size can be found (perhaps from physical exam, ultrasound or cystoscopy), then record that Size.
- for the following sites/diseases --
    - Hodgkin lymphoma (9650-9667)
    - ill-defined primary site (C76._)
    - Kaposi sarcoma (9140)
    - Letterer-Siwe disease (9754)
    - leukemia (9800-9948)
    - multiple myeloma (9732)
    - mycosis fungoides of skin (9700, C44._)
    - non-Hodgkin lymphoma (9670-9729)
    - reticuloendotheliosis (9940)
    - Sezary disease (9701)
    - unknown primary site (C80.9)
    - other hematologic neoplasms not listed above

**For Malignant Melanoma of the Skin, Conjunctiva, Penis (except C60.2 Body of penis), Scrotum, or Vulva ONLY**

(Primary Sites C44._, C51._, C60.0, C60.1, C60.8, C60.9, C63.2, C69.0 with Histologic Type Codes 8720-8790 and Behavior Code 3)

For cases diagnosed in 2002 and thereafter, the COC will adopt the SEER Extent of Disease coding rules for these cases. The MCR is adopting them effective immediately; for pre-2002 diagnoses, you may code Tumor Size using *either* the COC or SEER rules when reporting these cases to the MCR, although we would prefer the SEER rules if possible.

For malignant melanoma of the primary sites listed above, do not record the size of the primary tumor in this field. Record the thickness of the primary tumor or its depth of invasion (Breslow measurement) before tumor-reducing treatment. Do not record this in millimeters -- use hundredths of millimeters instead (round to the nearest hundredth of a mm). Codes follow.

| Tumor Thickness / Depth of Invasion | Code |
|---|---|
| no primary tumor found | **000** |
| up to 0.01 mm; 0.01 mm | **001** |
| . . . | . . . |
| 0.10 mm (0.01 cm) | **010** |
| . . . | . . . |
| 1.00 mm (0.1 cm) | **100** |
| . . . | . . . |
| 2.00 mm (0.2 cm) | **200** |
| . . . | . . . |
| 9.90 mm or more | **990** |
| unknown; not stated | **999** |

## Diagnostic Confirmation

NAACCR Version 9.1 Item 490, column 242

The Diagnostic Confirmation method indicates whether malignancy was confirmed microscopically at any time during the course of the patient's disease. It is a priority coding scheme, with the lower code number taking priority over other codes. The most conclusive method -- the microscopic examination of tissue -- is therefore coded **1**. Consider the patient's entire disease course when coding this field. Change the code to a lower number if a preferable method later confirms a diagnosis.

The codes for this field follow:

**Microscopic Confirmation**

**1** Positive histology

Microscopic confirmation includes tissue specimens from biopsy (including punch biopsy and needle biopsy), frozen section, surgery, autopsy, curettage and conization. This applies to tumor tissue taken from the primary site or a metastatic site. In addition, it also applies to bone marrow biopsy and bone marrow aspiration results. Hematologic confirmation of leukemia (i.e., peripheral blood smear) should also be coded **1**.

**2** Positive exfoliative cytology, no positive histology

Diagnosis by cytology is based upon the microscopic examination of cells, rather than tissue. Code **2** should not be used if cancer is ruled out by histologic findings. Included are fine needle aspirations (FNA), sputum smears, bronchial brushings/washings, tracheal washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, and cervical and vaginal smears. Also include paraffin-block specimens from concentrated spinal, pleural or peritoneal fluid.

**4** Positive microscopic confirmation, method not specified

These are cases that are reported as microscopically confirmed, but have no information about the method (histology or cytology).

**No Microscopic Confirmation**

**5** Positive laboratory test or marker study

This includes diagnoses of cancer based on certain laboratory tests or marker studies that are clinically diagnostic for cancer. Examples are an abnormal electrophoretic spike for multiple myeloma or Waldenstrom macroglobulinemia. Note that a PSA test is *not* clinically diagnostic for prostate cancer.

**6** Direct visualization without microscopic confirmation

This includes diagnoses of cancer by direct visualization and/or palpitation during surgical exploration, or by endoscopy or *gross* autopsy. Use this code only in the absence of positive histology or cytology.

**7** Radiography or other imaging technique without microscopic confirmation

This includes all cases diagnosed by radiology including ultrasound, computerized (axial) tomography (CT or CAT scans), and magnetic resonance imaging (MRI). Use this code only in the absence of positive histology or cytology.

**8** Clinical diagnosis only (other than **5**, **6** or **7**)

This includes cases diagnosed by clinical methods not mentioned previously. Use this code only in the absence of positive histology or cytology.

**9** Unknown whether or not microscopically confirmed

Use this code when the method of confirmation is unknown. (includes death certificate only cases)

Type of Reporting Source

NAACCR Version 9.1 Item 500, column 243

This code designates the source of information for the patient's cancer (i.e., the source of the documents or other information used to abstract the case).

The codes are as follows:

| **Information Source** | **Code** |
|---|---|
| hospital information - inpatient/outpatient, or clinic information; includes outpatient services of HMOs and large multi-specialty physician group practices where, at a minimum, the reports from multiple physicians and laboratories are filed in a single medical record for the patient | **1** |
| laboratory only - hospital or private (e.g., information from a pathology specimen report only) | **3** |
| private medical practitioner (physician office information); patient diagnosed in physician office and never an inpatient/outpatient at a hospital/clinic | **4** |
| nursing home, convalescent hospital, hospice information | **5** |
| autopsy report only (neoplasm discovered and diagnosed for the first time as the result of an autopsy) | **6** |
| death certificate only | **7** |

Coding is hierarchical. If there are multiple sources of information, choose from the codes in this order: **1**, **4**, **5**, **3**, **6**.

Note that code 7 is not used by hospitals.

## AJCC TNM Staging System

Both the clinical and pathologic staging fields are collected by the MCR. None of the fields may be left empty. If you have enough information to specifically stage a case clinically and pathologically, then both stages should be reported.

For simultaneous independent bilateral tumors in paired organs, each primary should be staged separately.

*Example*: A patient is diagnosed in May with a 1-cm duct carcinoma of the right breast and a 0.5-cm lobular carcinoma of the left breast. Stage each primary separately (T1b for the right, T1a for the left).

If the primary site is not *definitely* known, AJCC staging of the cancer should be based on "reasonable clinical certainty" of a primary site identification. If there is *not* "reasonable clinical certainty" indicating one primary site, then the AJCC staging should be "not applicable" (as for an unknown primary site).

*Examples*:

- A CT scan finds brain metastases. The physician states in the medical record that the primary site is probably lung. Use the AJCC scheme for lung primaries to stage this case.
- A patient has liver metastases, and it is indicated that the primary site may be colon or lung. Since a primary site is not clearly identified, this case should be AJCC-staged T88N88M88.

Lymph nodes are not often surgically removed for *in situ* tumors. The AJCC classification is therefore usually "pTis cN0 cM0, cStage Group 0" because there is usually only clinical evaluation of nodal and distant disease (see "Clarification #3B" in the AJCC's *Cancer Staging Manual, Fifth Edition* Clarifications).

The Clinical AJCC classification (cTNM) is based on information and evidence obtained before treatment. It is especially important for sites which are accessible for clinical examination, including the cervix, oral cavity, and larynx. Use this classification for organs where only clinical findings are used or available to evaluate the extent of disease. Physical examination, imaging, endoscopy, biopsy, surgical exploration and other relevant findings are the basis of clinical staging. Evaluate the clinical stage of disease using all information available before the first cancer-directed treatment.

The Pathologic AJCC classification (pTNM) is based on information obtained before treatment and supplemented by additional evidence from surgery and pathologic examination of resected specimens. It is a combination of all findings through the most definitive surgery (for example, metastases only found after definitive surgery are not included in the AJCC staging). The pathologic stage provides the best data to estimate prognosis and calculate results. Pathologic assessment of the primary tumor requires a resection or biopsy adequate to evaluate the highest pT category. Pathologic regional lymph node assessment requires the surgical removal of enough nodes to confirm the absence of regional lymph node metastasis and evaluate the highest pN category. There is no minimum number of nodes that must be examined -- even one may be sufficient for some cases.

Pathologic staging takes precedence over clinical staging, except as follows:

There are some cases in which clinical staging takes precedence -- when a patient has treatment pre-operatively that may have affected the extent of disease, or when a patient has no cancer-directed surgery.

*Examples*: breast cancer treated pre-operatively with chemotherapy and radiation
small cell carcinoma of the lung biopsied and treated with chemotherapy
a pancreas primary diagnosed without histologic confirmation

The MCR collects 2 characters in each TNM field. The MCR **does not collect** various supplementary prefixes, suffixes and staging extensions used in the AJCC system:

aTNM when the stage is determined from autopsy findings (the MCR collects only previously unsuspected cases found incidentally through autopsy);

LX, L0 and L1 for lymphatic invasion;

T(d) to indicate diffuse retinoblastoma;

T(f) to indicate family history of retinoblastoma;

T(m) or T(#) to indicate multiple tumors or the specific number of tumors in one site;

rTNM when recurrences are staged after a disease-free interval (we do not collect recurrences);

RX, R0, R1 and R2 for residual tumors following treatment;

SX, S0, S1 and S2 for scleral invasion in opthalmic melanomas;

VX, V0, V1 and V2 for venous invasion;

yTNM when staging is done during/after initial multimodality therapy.

If these prefixes, suffixes or extensions are recorded at your facility, please include the information in one of the Staging Narratives. For example, if you recorded a yTNM stage after chemotherapy to reduce tumor size, the MCR will not realize that the TNM stage we are seeing was affected by treatment -- unless you tell us so in a narrative field.

Clinical T

NAACCR Version 9.1 field "TNM Clin T", Item 940, columns 432-433

Under the TNM system, the T Element is used to describe the primary tumor's size and/or extension. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for detailed site-specific/histology-specific coding rules.

The clinical T classification (cT) is based on information and evidence obtained before treatment. It is especially important for sites that are accessible for clinical examination, including cervix, oral cavity, and larynx. Use clinical classifications where only clinical findings are used or available to evaluate the extent of disease. The physical examination, imaging, endoscopy, incisional biopsy, surgical exploration, and other relevant findings are the basis of clinical staging. Evaluate the clinical stage of disease using all information available before the first cancer-directed treatment.

When there are multiple synchronous tumors being reported as one primary, the T Element for the *largest* individual tumor is coded. The MCR does not collect the special AJCC designations for such multiple tumors [e.g., T2(m)], nor the number of such tumors [e.g., T2(3)] in the T Element (and the "EOD -- Tumor Size" field will also only reflect the size of the largest tumor). You may include tumor multiplicity information in the Staging Narratives or "Narrative Primary Site" fields. The number of tumors is important in determining the T Element for some cancer types (for example, see the AJCC coding for liver and intrahepatic bile duct carcinomas).

*Examples*:

- There are two simultaneous duct carcinomas in the upper outer quadrant of the right breast -- one with diameter 0.4 cm, the other with diameter 0.8 cm. The case is reported with T**1B** because this corresponds to the size of the larger lesion. The Staging Narratives should include the fact that there were two tumors, along with their sizes.
- There are two primary tumors -- one sized at 1.1 cm, the other at 2.1 cm -- in the same lobe of the liver, without any vascular invasion. The T Element is T**3_**. Since this could also describe a single tumor > 2 cm or several smaller tumors with vascular invasion, use a Staging Narrative to specify the situation that was coded.

The following general definitions are used throughout the T Element classification:

TX - primary tumor cannot be assessed or is unknown

T0 - no evidence of a primary tumor

Tis - carcinoma *in situ* (a pathologic T category)

T1, T2, T3, T4 - describe increasing size and/or local extent of the primary tumor

Use **X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign a T value.

*Example*: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating duct carcinoma. The patient is lost to follow-up. AJCC requires the pathologic examination of tissue and the palpation of axillary lymph nodes for clinical staging. Record cT**X_**NX_MX_.

T**X_** is also coded for certain lung cancers (occult) when a primary tumor mass cannot be found or evaluated.

Code T**88** is not included in AJCC staging. The addition of this code enables registries to distinguish unstaged cases in which the site or histologic type has no AJCC staging scheme from cases that could not be staged because the information was incomplete. Use T**88** when the site or histologic type does not have an AJCC staging scheme (or does not have a scheme for classifying the T Element).

*Examples*:

- Leukemia, trachea, brain primary -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record T**88**N88M88.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T**88**N88M88.
- Lymphomas have AJCC Stage Grouping schemes, but not TNM Elements. Record T**88**N88M88.

Some T categories are only defined for certain types of cancer. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

Ta (code **A_**) is defined for penis, renal pelvis and ureter, bladder, and urethra;

Tis pu (code **SU**) is defined for urethra;

Tis pd (code **SD**) is defined for urethra;

T1a1 and T1a2 (codes **A1** and **A2**) are defined for cervix uteri;

T1b1 and T1b2 (codes **B1** and **B2**) are defined for cervix uteri;

T1c is defined for breast, corpus uteri, ovary, fallopian tube, and prostate;

T2c is defined for ovary and fallopian tube;

T3c is defined for ovary, fallopian tube, and kidney;

T4a and T4b are defined for bladder, lacrimal gland, and breast;

T4c and T4d are defined for breast.

Choose the lower (less advanced) T category when there is uncertainty in which category to assign. For example, in the larynx squamous cell carcinoma scheme, the T4 categories specify that the tumor invades *through* the thyroid cartilage, while the T3 categories make no mention of thyroid cartilage involvement; so if a laryngeal tumor invades *into* but not *through* thyroid cartilage, it would be classified T3 because it does not meet the T4 requirements.

The MCR collects 2 characters in this field. If the value is only one character, enter it on the left and leave the second space blank. The following table shows how each T category should be coded (both cT and pT categories are included in this table).

| T Category | Code | T Category | Code | T Category | Code | T Category | Code |
|---|---|---|---|---|---|---|---|
| TX* | **X_** | T1mic | **1M** | T2 | **2_** | T4 | **4_** |
| T0 | **0_** | T1 | **1_** | T2a | **2A** | T4a | **4A** |
| Ta | **A_** | T1a | **1A** | T2b | **2B** | T4b | **4B** |
| Tis | **IS** | T1a1 | **A1** | T2c | **2C** | T4c | **4C** |
| Tispu | **SU** | T1a2 | **A2** | T3 | **3_** | T4d | **4D** |
| Tispd | **SD** | T1b | **1B** | T3a | **3A** | T not applicable** | **88** |
| | | T1b1 | **B1** | T3b | **3B** | | |
| | | T1b2 | **B2** | T3c | **3C** | | |
| | | T1c | **1C** | | | | |

* This cancer has a Fifth Edition AJCC T classification scheme, but there is not enough information to specify the T; occult lung cancers (primary tumor not present or not evaluable).

** There is no Fifth Edition AJCC T classification for this cancer.

Clinical N

NAACCR Version 9.1 field "TNM Clin N", Item 950, columns 434-435

The N Element identifies the absence or presence of regional lymph node metastases. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

The following general definitions are used throughout the TNM classification:

NX - regional lymph nodes cannot be assessed or status unknown

N0 - nodes were assessed and there was no evidence of regional lymph node metastasis

N1, N2, N3 - indicate increasing involvement of regional lymph nodes

Classify a primary tumor that directly extends into lymph nodes in the N Element as lymph node metastasis (rather than in the T Element as continuous extension of the primary tumor).

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* and classified in the M Element.

A grossly recognizable tumor nodule in the connective tissue of a lymph drainage area that is *more than 3 millimeters* in greatest dimension is classified in the N Element, even if there is no evidence of residual lymph node tissue found in the nodule. (These nodules are coded in the N Element not because they are thought to be lymph nodes, but because patients with this regional disease spread have prognoses similar to those with regional lymph node involvement.)

Use code N**X**_ when the site or histologic type has an AJCC staging scheme but there is not enough information to assign an N Element code.

*Example*: A testicular mass is biopsied. The biopsy identifies an embryonal carcinoma. The patient is lost to follow-up. The requirements for clinical N staging of testicular cancers have not been met. Code cN**X**_.

Code N**88** is not included in AJCC staging, but this code helps distinguish unstaged cases with no AJCC staging scheme from cases with a staging scheme that could not be staged. Use N**88** when the site/histologic type does not have an AJCC N staging scheme.

*Examples*:

- Leukemia, pituitary gland, ill-defined digestive primary site -- These do not have staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition*. Record T88N**88**M88.
- The pathology report identifies a gastric sarcoma. The stomach staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N**88**M88.
- Gestational trophoblastic tumors do not have N categories. Record N**88**.

Some N categories are only defined for certain types of cancer. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

N1a and N1b are defined for thyroid;

N3a and N3b are defined for nasopharynx.

Choose the lower (less advanced) N category when there is any uncertainty. The MCR collects 2 characters in this field. If there is only one character, enter it on the left and leave the second space blank.

| N Category | Code | N Category | Code |
|---|---|---|---|
| NX* | **X_** | N2 | **2_** |
| N0 | **0_** | N2a | **2A** |
| N1 | **1_** | N2b | **2B** |
| N1a | **1A** | N2c | **2C** |
| N1b | **1B** | N3 | **3_** |
| | | N3a | **3A** |
| | | N3b | **3B** |
| | | N not applicable** | **88** |

* This cancer has a Fifth Edition AJCC N classification scheme, but there is not enough information to specify the N.

** There is no Fifth Edition AJCC N classification for this cancer.

Clinical M

NAACCR Version 9.1 field "TNM Clin M", Item 960, columns 436-437

The M Element records the presence or absence of distant metastases (including spread to non-regional lymph nodes). Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* and classified in the M Element.

The following general definitions are used throughout the TNM classification:

MX - presence of distant metastasis cannot be assessed or is unknown

M0 - no known distant metastasis

M1 - distant metastasis present

Use M**X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to code an M Element.

*Example*: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating duct carcinoma. The patient is lost to follow-up. AJCC requires tumor size and palpation of axillary lymph nodes for clinical staging. Record TX_NX_M**X_**.

Code M**88** is not included in AJCC staging, but its use helps registries distinguish unstaged cases in which the site/histology has no AJCC staging scheme from cases that could not be staged because of incomplete information. Use M**88** when the site or histologic type does not have an AJCC staging scheme.

*Examples*:

- Leukemia, parathyroid, dermatofibrosarcoma, nasal cavity -- There are no staging schemes in the *AJCC Cancer Staging Manual, Fifth Edition* for these cancers. Record T88N88M**88**.
- The medical record identifies a breast mass as sarcoma. The breast staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N88M**88**.

Only a few cancers have some special M Element codes. Because there are so few, they are noted here for convenience (but always refer to the AJCC staging manual for details):

for the lower thoracic esophagus:
- M1a indicates metastasis to the celiac nodes
- M1b indicates any other distant metastasis

for the midthoracic esophagus:
- M1b indicates involvement of non-regional nodes and/or any other distant metastasis

for the upper thoracic esophagus:
- M1a indicates metastasis to the cervical nodes
- M1b indicates any other distant metastasis

for melanomas of the skin (including skin of vulva, penis and scrotum):
- M1a indicates metastasis to other skin sites, subcutaneous tissue or nonregional nodes
- M1b indicates metastasis to the viscera

for gestational trophoblastic tumors:
- there is no MX_ or M1_ category
- M0_ indicates no *clinical* metastases present
- M1a indicates lung metastasis
- M1b indicates any other distant metastasis

for prostate cancers:
- M1a indicates metastasis to nonregional nodes
- M1b indicates metastasis to bone(s)
- M1c indicates any other distant metastasis

for testicular cancers:
- M1a indicates metastasis to nonregional nodes or lung(s)
- M1b indicates any other distant metastasis

The MCR collects 2 characters in this field. The MCR **does *not* collect** the additional AJCC M1 notations "PUL", "OSS", "HEP", etc. (see page 7 in the *Cancer Staging Manual, Fifth Edition*) to denote the site(s) of distant metastasis. Please include any known site(s) of distant metastasis in a Staging Narrative field.

Choose the lower (less advanced) M category when there is any uncertainty in which category to assign.

| M Category | Code |
|---|---|
| MX* | **X_** |
| M0 | **0_** |
| M1 | **1_** |
| M1a | **1A** |
| M1b | **1B** |
| M1c | **1C** |
| M not applicable** | **88** |

* This cancer has a Fifth Edition AJCC M classification scheme, but there is not enough information to specify the M Element.

** There is no Fifth Edition AJCC M classification for this cancer.

Clinical Stage Grouping

NAACCR Version 9.1 field "TNM Clin Stage Group", Item 970, columns 438-439

The Stage Grouping indicates the anatomic extent of disease and groups cases which are expected to have similar prognoses. The Clinical Stage Grouping is important for selecting and evaluating the primary therapy.

The TNM Stage Grouping is usually based on the previously coded TNM Elements. Non-Hodgkin lymphomas and Hodgkin lymphomas have only Stage Groupings in the TNM system (no TNM Elements). Many of the opthalmic cancers have TNM Elements but no Stage Groupings. Tumor Size, histopathologic Grade, Age at Diagnosis, risk factors, or serum tumor marker data are needed to determine the Stage Grouping for some cancer types. (When appropriate, relevant risk factor information can be included in the "Text--Staging" field since the MCR does not collect codes for risk factors.) Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific coding rules.

Code **88** does not appear in AJCC staging. Use code **88** when the site or histologic type does not have an AJCC Stage Grouping scheme.

*Examples*:

- Leukemia, central nervous system, adrenal gland, unknown primary -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record Stage Grouping **88**.
- Carcinoma of the eyelid -- The appropriate staging scheme in the *AJCC Cancer Staging Manual, Fifth Edition* has TNM Elements, but no Stage Groupings. Record Stage Grouping **88**.

Code **99** also does not appear in AJCC staging. Use code **99** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign a Stage Grouping.

*Example*: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating duct carcinoma. The patient is lost to follow-up. The AJCC TNM elements are TX_NX_MX_. Record Stage Grouping **99**.

The MCR collects 2 characters in this field. If the code is only one digit, enter it on the left and leave the second space blank. For Hodgkin lymphomas and non-Hodgkin lymphomas, the MCR does *not* collect the Stage Grouping extensions "E", "S" and "E+S" to indicate extralymphatic involvement, involvement of the spleen, and both; neither does the MCR explicitly collect the number of lymph node regions involved (e.g., "$II_3$"), nor "A" and "B" to indicate systematic symptoms. Such details should be included in the "Text--Staging" field.

Some Stage Grouping categories are only defined for certain cancers. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

occult (code **OC**) is defined for lung;

0a (code **0A**) and 0is (code **0S**) are defined for renal pelvis and ureter, bladder, and urethra;

IA1 and IA2 (codes **A1** and **A2**) are defined for cervix uteri;

IB1 and IB2 (codes **B1** and **B2**) are defined for cervix uteri;

IC (code **1C**) is defined for corpus uteri, ovary, fallopian tube, and gestational trophoblastic tumors;

IS (code **1S**) is defined for testis;

IIC is defined for ovary, fallopian tube, gestational trophoblastic tumors, and testis.

Choose the lower (less advanced) category when there is any uncertainty in which to assign.

| Stage Grouping | Code | Stage Grouping | Code | Stage Grouping | Code |
|---|---|---|---|---|---|
| Stage Occult | **OC** | Stage IB1 | **B1** | Stage IIIA | **3A** |
| Stage 0 | **0_** | Stage IB2 | **B2** | Stage IIIB | **3B** |
| Stage 0A | **0A** | Stage IC | **1C** | Stage IIIC | **3C** |
| Stage 0is | **0S** | Stage IS | **1S** | Stage IV | **4_** |
| Stage I | **1_** | Stage II | **2_** | Stage IVA | **4A** |
| Stage IA | **1A** | Stage IIA | **2A** | Stage IVB | **4B** |
| Stage IA1 | **A1** | Stage IIB | **2B** | Stage IVC | **4C** |
| Stage IA2 | **A2** | Stage IIC | **2C** | Stage Grouping not applicable* | **88** |
| Stage IB | **1B** | Stage III | **3_** | unknown, stage X** | **99** |

* There is no Fifth Edition AJCC Stage Grouping classification for this cancer.

** This cancer has a Fifth Edition AJCC Stage Grouping classification, but there is not enough information to specify the Stage Grouping.

Pathologic T

NAACCR Version 9.1 field "TNM Path T", Item 880, columns 422-423

The Pathologic T Element (pT) describes the primary tumor's size and/or extension. Refer to the AJCC *Cancer Staging Manual, Fifth Ed.* for site-specific/histology-specific coding rules.

Pathologic classification is based on information obtained before treatment and supplemented by additional evidence from surgery and pathologic examination of the resected specimen. It is a combination of all findings through the most definitive surgery done. The pathologic stage provides the most precise data to estimate prognosis and calculate end results. Pathologic assessment of the primary tumor generally requires a resection of the primary tumor or biopsy specimen adequate to evaluate the highest pT category.

When there are multiple synchronous tumors being reported as one primary, the T Element for the *largest* individual tumor is coded. The MCR does not collect the special AJCC designations for such multiple tumors [e.g., T2(m)], nor the number of such tumors [e.g., T2(3)] in the T Element (and the "Tumor Size" field will also only reflect the size of the largest tumor). You may include tumor multiplicity information in the Staging Narratives or "Narrative Primary Site" fields. The number of tumors is important in determining the T Element for some cancer types (for example, see the AJCC coding for liver and intrahepatic bile duct carcinomas).

*Examples*: There are two simultaneous duct carcinomas in the upper outer quadrant of the right breast -- one with diameter 0.4 cm, the other with diameter 0.8 cm. The case is reported with T**1B** because this corresponds to the size of the larger lesion. A Staging Narrative should include the fact that there were two tumors, along with their sizes.

There are two primary tumors -- one sized 1.1 cm, the other 2.1 cm -- in the same lobe of the liver, without any vascular invasion. The T Element is T**3_**. Since this could also describe a single tumor > 2 cm or several smaller tumors with vascular invasion, use a Staging Narrative to specify the situation that was coded.

A tumor nodule, up to 3 millimeters in greatest dimension, in the connective tissue of a lymph drainage area *without histologic evidence of residual lymph node tissue* is classified in the T Element (as discontinuous extension of the primary tumor) rather than in the N Element.

Many sites in the AJCC staging system specifically include a classification for carcinomas *in situ* as "Tis". If there is an accepted histologic classification for carcinoma *in situ* as determined by a pathologist, you may use "pTis" even if the *Cancer Staging Manual, Fifth Edition* does not include this category for the given primary site.

The following general definitions are used throughout the TNM classification:

TX - primary tumor cannot be assessed or is unknown.

T0 - no evidence of a primary tumor

Tis - carcinoma *in situ**

T1, T2, T3, T4 - describe increasing size* and/or local extent of the primary tumor

* *Note*: For AJCC staging schemes in which a specific tumor size plays an important role in assigning the T Element category (such as breast carcinomas), there is sometimes confusion about how to stage an *in situ* case that has a recorded Tumor Size. All lesions that are completely *in situ* (no invasive component) are assigned pTis regardless of the Tumor Size. A large *in situ* tumor does not have the same prognosis as an invasive cancer with the same tumor size. pT1_, pT2_, etc. are assigned to *invasive* cancers of increasing size and/or extent. For a tumor with both *in situ* and invasive components, only the invasive component's size should be recorded and used for assigning the T Element.

Use code **X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign a T value.

*Example*: A biopsy of a breast mass identifies infiltrating duct carcinoma. The patient is lost to follow-up. The AJCC staging scheme requires excision of the primary tumor with macroscopically clean margins for pathologic staging. Record pT**X_**.

Code T**88** is not included in AJCC staging. This code enables the MCR to distinguish cases in which the site or histologic type has no AJCC staging scheme from cases that could not be staged because the information was incomplete. Use T**88** when the site or histologic type does not have an AJCC staging scheme.

*Examples*:

- Leukemia, dermatofibrosarcoma, brain primary -- These have no staging schemes in the AJCC *Cancer Staging Manual, Fifth Ed*. Record T**88**N88M88.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the *AJCC Cancer Staging Manual, Fifth Ed*. applies only to carcinomas. Record T**88**N88M88.
- Lymphomas have AJCC Stage Groupings, but no TNM Elements. Record T**88**N88M88.

Some T categories are only defined for certain types of cancer. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

Ta (code **A_**) is defined for penis, renal pelvis and ureter, bladder, and urethra;

Tis pu (code **SU**) is defined for urethra;

Tis pd (code **SD**) is defined for urethra;

pT1 mic (code **1M**) is defined for breast;

T1a1 and T1a2 (codes **A1** and **A2**) are defined for cervix uteri;

T1b1 and T1b2 (codes **B1** and **B2**) are defined for cervix uteri;

T1c is defined for breast, corpus uteri, ovary, fallopian tube, and prostate;

T2c is defined for ovary and fallopian tube;

T3c is defined for ovary, fallopian tube, and kidney;

T4a and T4b are defined for melanoma of skin, bladder, lacrimal gland, and breast;

T4c and T4d are defined for breast.

Choose the lower (less advanced) T category when there is any uncertainty in which category to assign. For example, in the larynx squamous cell carcinoma scheme, the T4 categories specify that the tumor invades *through* the thyroid cartilage, while the T3 categories make no mention of thyroid cartilage involvement; so if a laryngeal tumor invades *into* but not *through* thyroid cartilage, it would be classified T3 because it does not meet the T4 requirements.

The MCR collects 2 characters in this field. For only one character, enter it on the left and leave the second space blank. The following table shows the code for each T category.

| T Category | Code | T Category | Code | T Category | Code | T Category | Code |
|---|---|---|---|---|---|---|---|
| TX* | **X_** | T1mic | **1M** | T2 | **2_** | T4 | **4_** |
| T0 | **0_** | T1 | **1_** | T2a | **2A** | T4a | **4A** |
| Ta | **A_** | T1a | **1A** | T2b | **2B** | T4b | **4B** |
| Tis | **IS** | T1a1 | **A1** | T2c | **2C** | T4c | **4C** |
| Tispu | **SU** | T1a2 | **A2** | T3 | **3_** | T4d | **4D** |
| Tispd | **SD** | T1b | **1B** | T3a | **3A** | T not applicable** | **88** |
| | | T1b1 | **B1** | T3b | **3B** | | |
| | | T1b2 | **B2** | T3c | **3C** | | |
| | | T1c | **1C** | | | | |

* This cancer has a Fifth Edition AJCC T classification scheme, but there is not enough information to specify the T; occult lung cancers (primary tumor mass not present or not evaluable).

** There is no Fifth Edition AJCC T classification for this cancer.

Pathologic N

NAACCR Version 9.1 field "TNM Path N", Item 890, columns 424-425

Pathologic N (pN) identifies the absence or presence of regional lymph node metastases. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

The following general definitions are used throughout the TNM classification:

NX - regional lymph nodes cannot be assessed or status unknown

N0 - nodes were assessed and there was no evidence of regional lymph node metastasis

N1, N2, N3 - indicate increasing involvement of regional lymph nodes

If the primary tumor extends directly into a lymph node, classify this in the N Element as a lymph node metastasis (rather than in the T Element).

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* metastasis and classified in the M Element.

A grossly recognizable tumor nodule in the connective tissue of a lymph drainage area that is *more than 3 millimeters* in greatest dimension is classified in the N Element, even if there is no evidence of residual lymph node tissue found in the nodule. (These nodules are coded in the N Element not because they are thought to be lymph nodes, but because patients with this regional disease spread have prognoses similar to those with regional lymph node involvement.)

Use code N**X**_ when the site or histologic type has an AJCC staging scheme but there is not enough information to assign an N Element code.

*Example*: A patient has a biopsy of a testicular mass. The biopsy identifies an embryonal carcinoma. The patient is lost to follow-up. This type of case has an AJCC staging scheme, but no assessment of regional lymph node involvement was made. Record N**X**_.

Code **88** does not appear in AJCC staging. Its use enables registries to distinguish cases unstaged because of insufficient information from those unstaged because they have no AJCC staging scheme. Use code **88** when the site/histology does not have an AJCC staging scheme.

*Examples*:

- Adrenal gland, unknown primary site -- These have no staging schemes in the *AJCC Cancer Staging Manual, Fifth Edition*. Record T88N**88**M88.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the *AJCC Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N**88**M88.
- Gestational trophoblastic tumors do not have N categories. Record N**88**.

Some N categories are only defined for certain cancers. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

pN1a and pN1b are defined for exocrine pancreas, breast, and thyroid;

pN1bi, pN1bii, pN1biii and pN1biv (code **1B** for all) are defined for breast;

N3a and N3b are defined for nasopharynx.

Choose the lower (less advanced) N category when there is uncertainty. The MCR collects 2 characters. If there is only one character, enter it on the left and leave the second space blank.

| N Category | Code | N Category | Code |
|---|---|---|---|
| NX* | **X_** | N2 | **2_** |
| N0 | **0_** | N2a | **2A** |
| N1 | **1_** | N2b | **2B** |
| N1a | **1A** | N2c | **2C** |
| N1b | **1B** | N3 | **3_** |
| | | N3a | **3A** |
| | | N3b | **3B** |
| | | N not applicable** | **88** |

* This cancer has a Fifth Edition AJCC N classification scheme, but there is not enough information to specify the N.

** There is no Fifth Edition AJCC N classification for this cancer.

Pathologic M

NAACCR Version 9.1 field "TNM Path M", Item 900, columns 426-427

The M Element describes the presence or absence of distant metastases (including non-regional lymph nodes). Refer to the AJCC *Cancer Staging Manual, Fifth Ed.* for site- and histology-specific coding rules.

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* and classified in the M Element.

The following general definitions are used throughout the TNM classification:

MX - presence of distant metastasis cannot be assessed or is unknown

M0 - no known distant metastasis

M1 - distant metastasis present

Use M**X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to specify an M Element.

*Example*: A patient has a breast mass biopsy, finding infiltrating duct carcinoma. The patient is lost to follow-up. Breast carcinomas have an AJCC staging scheme, but the status of distant metastasis has not been evaluated. Record TX_NX_M**X_**.

Code **88** does not appear in AJCC staging. This code allows registries to distinguish unstaged cases in which the site/histology has no AJCC staging scheme from cases that could not be staged because of incomplete information. Use M**88** when the site or Histologic Type does not have an AJCC Staging scheme.

*Examples*: Leukemia, central nervous system, an ill-defined pelvic site -- These have no staging schemes in the AJCC *Cancer Staging Manual, Fifth Ed*. Record T88N88M**88**.

Pathology identifies stomach sarcoma. The stomach staging scheme in the AJCC *Cancer Staging Manual, Fifth Ed*. applies only to carcinomas. Record T88N88M**88**.

The MCR collects 2 characters in this field. The MCR **does not collect** the additional AJCC M1 notations "PUL", "OSS", "HEP", etc. (see page 7 in the *Cancer Staging Manual, Fifth Ed*.) to denote the site(s) of distant metastasis. Please include any known site(s) of distant metastasis in a Staging Narrative.

Only a few cancers have some special M Element codes. They are noted here for convenience (but always refer to the AJCC staging manual for details):

for the lower thoracic esophagus: M1a indicates metastasis to the celiac nodes
M1b indicates any other distant metastasis

for the midthoracic esophagus: M1b indicates involvement of nonregional nodes and/or any other distant metastasis

for the upper thoracic esophagus: M1a indicates metastasis to the cervical nodes
M1b indicates any other distant metastasis

for melanomas of the skin (including skin of vulva, penis and scrotum):
M1a indicates metastasis to other skin sites, subcutaneous tissue or nonregional nodes
M1b indicates metastasis to the viscera

for gestational trophoblastic tumors: there are no MX_ and M1_ categories
M0_ indicates no *clinical* metastases present
M1a indicates lung metastasis
M1b indicates any other distant metastasis

for prostate cancers: M1a indicates metastasis to nonregional nodes
M1b indicates metastasis to bone(s)
M1c indicates any other distant metastasis

for testicular cancers: M1a indicates metastasis to nonregional nodes or lung(s)
M1b indicates any other distant metastasis

Choose the lower (less advanced) category when there is any uncertainty in which to assign.

| M Category | Code |
|---|---|
| MX* | **X_** |
| M0 | **0_** |
| M1 | **1_** |
| M1a | **1A** |
| M1b | **1B** |
| M1c | **1C** |
| M not applicable** | **88** |

* This cancer has a Fifth Edition AJCC M classification scheme, but there is not enough information to specify the M.

** There is no Fifth Edition AJCC M classification for this cancer.

## Pathologic Stage Grouping

NAACCR Version 9.1 field "TNM Path Stage Group", Item 910, columns 428-429

The Stage Grouping describes the anatomic extent of disease. Different cases which fall into the same Stage Grouping are expected to have similar prognoses. The Pathologic Stage Grouping can be used as a guide for the need of adjuvant therapy, for reporting end results, and estimation of prognosis. In order to assign a Pathologic Stage Grouping, it is not always necessary to have three specific Pathologic TNM Elements. If sufficient tissue has been removed for pathologic examination to evaluate the highest T and N categories, you may use either the cM or pM to assign a Pathologic Stage Grouping.

The TNM Stage Grouping is usually based on the previously coded TNM Elements. Non-Hodgkin lymphomas and Hodgkin lymphomas have *only* Stage Groupings in the TNM system (no TNM Elements). Many of the opthalmic cancers have TNM Elements but no Stage Groupings. Tumor Size, histopathologic Grade, Age at Diagnosis, risk factors, or serum tumor marker data are needed to determine the Stage Grouping for some cancer types. (When relevant, risk factor information should be included in the "Text--Staging" field because the MCR does not collect codes for risk factors.) Always refer to the AJCC *Cancer Staging Manual, Fifth Ed.*. for appropriate site-specific and histology-specific coding rules.

Code **88** does not appear in AJCC staging. Use code **88** when the site or histologic type does not have an AJCC Stage Grouping scheme.

*Examples*:

- Leukemia, dermatofibrosarcoma, trachea, unknown primary site -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record Stage Grouping **88**.
- The pathology report identifies a carcinoma of the eyelid. The appropriate staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* has TNM Elements, but no Stage Groupings. Record **88** here.

Code **99** also does not appear in AJCC staging. Use **99** when the cancer type has an AJCC staging scheme but there is not enough information to assign a pathologic Stage Grouping.

*Example*: A patient has a fine needle biopsy of a breast mass, identifying infiltrating duct carcinoma. The patient is lost to follow-up. The TNM Elements are TX_NX_MX_. Record Stage Grouping **99**.

The MCR collects 2 characters in this field. If the stage code is only one character, enter it on the left and leave the second space blank. For Hodgkin lymphomas and non-Hodgkin lymphomas, the MCR does *not* collect the Stage Grouping extensions "E", "S" and "E+S" to indicate extralymphatic involvement, involvement of the spleen, and both; neither does the MCR explicitly collect the number of lymph node regions involved (e.g., "$II_3$"), nor "A" and "B" to indicate systematic symptoms. Such details should be included in the "Text--Staging" field.

Some Stage Grouping categories are only defined for certain cancers. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

occult (code **OC**) is defined for lung;

0a (code **0A**) and 0is (code **0S**) are defined for renal pelvis and ureter, bladder, and urethra;

IA1 and IA2 (codes **A1** and **A2**) are defined for cervix uteri;

IB1 and IB2 (codes **B1** and **B2**) are defined for cervix uteri;

IC (code **1C**) is defined for corpus uteri, ovary, fallopian tube, and gestational trophoblastic tumors;

IS (code **1S**) is defined for testis;

IIC is defined for ovary, fallopian tube, gestational trophoblastic tumors, and testis.

Choose the lower (less advanced) grouping when there is any uncertainty in which to assign.

| Stage Grouping | Code | Stage Grouping | Code | Stage Grouping | Code |
|---|---|---|---|---|---|
| Stage Occult | **OC** | Stage IB1 | **B1** | Stage IIIA | **3A** |
| Stage 0 | **0_** | Stage IB2 | **B2** | Stage IIIB | **3B** |
| Stage 0A | **0A** | Stage IC | **1C** | Stage IIIC | **3C** |
| Stage 0is | **0S** | Stage IS | **1S** | Stage IV | **4_** |
| Stage I | **1_** | Stage II | **2_** | Stage IVA | **4A** |
| Stage IA | **1A** | Stage IIA | **2A** | Stage IVB | **4B** |
| Stage IA1 | **A1** | Stage IIB | **2B** | Stage IVC | **4C** |
| Stage IA2 | **A2** | Stage IIC | **2C** | Stage Grouping not applicable* | **88** |
| Stage IB | **1B** | Stage III | **3_** | unknown, stage X** | **99** |

* There is no Fifth Edition AJCC Stage Grouping classification for this cancer.

** This cancer has a Fifth Edition AJCC Stage Grouping classification, but there is not enough information to specify the Stage Grouping.

## TNM Edition Number

NAACCR Version 9.1 Item 1060, column 452

This field identifies the edition of the AJCC *Manual for Staging of Cancer* that was used to stage the case. Staging criteria may differ between editions. This code allows analysis of cases grouped by edition number. You should use the staging manual that is *appropriate* for the *year of diagnosis* of a case, but please code the book *that was actually used to stage the case*, even if it is not the appropriate edition to have used for the given year of diagnosis.

| **AJCC Staging Edition** | **Code** |
|---|---|
| not stated (case has an AJCC staging scheme, but staging was not done) | **0** |
| First Edition (for cases diagnosed before 1984) | **1** |
| Second Edition (for cases diagnosed 1984-1988) | **2** |
| Third Edition (for cases diagnosed 1989-1992) | **3** |
| Fourth Edition (for cases diagnosed 1993-1997) | **4** |
| Fifth Edition (for cases diagnosed 1998-2002) | **5** |
| not applicable (case does *not* have an AJCC staging scheme in the edition used) | **8** |
| unknown edition (case was AJCC-staged, but the edition used is unspecified) | **9** |

If the year of diagnosis is unknown to you, stage the case as if it had been diagnosed in your facility's Date of First Contact year (Year First Seen for This Primary).

## SEER Summary Stage 1977

NAACCR Version 9.1 Item 760, column 388

Refer to the Third Edition of this manual for coding diagnoses made before 2001.

SEER Summary Stage 2000 — NAACCR Version 9.1 Item 759, column 387

SEER Summary Staging groups cases into broad categories (such as localized, regional and distant). Note: The COC only requires Summary Staging for cases which are not TNM-staged. The MCR requires *both* Summary Staging and TNM staging for all reportable cases (use "unknown" and "not applicable" codes as necessary).

All cases diagnosed in 2001 and thereafter must be staged using the red *SEER Summary Staging Manual 2000* (published 2001). All pre-2001 diagnoses must be staged using the green *Summary Staging Guide* (1977) [equivalent to the *SEER Self Instructional Manual for Tumor Registrars - Book 6*]. The two books have different staging schemes and rules -- be sure to use the correct book to stage each case based on its diagnosis year. If your data system shows both fields "SEER Summary Stage 1977" and "SEER Summary Stage 2000" on-screen, be sure that the correct field gets filled in based on each case's diagnosis year; if your system shows only one Summary Stage field, be sure to use the correct book to stage each case based on its diagnosis year; when the case is exported, your system will put that single field into the appropriate place in the NAACCR layout based on each case's diagnosis year.

If the year of diagnosis is unknown to you, stage the case as if it had been diagnosed in your facility's Date of First Contact year (Year First Seen for This Primary).

General Guidelines

Rules governing Summary Staging appear in the *SEER Summary Staging Manual 2000*'s first chapter (pages 2-15). The *entire* set of Guidelines on p. 10 is very important to keep in mind as you apply any specific staging scheme. Some of the Guidelines are paraphrased here:

- Instructions in a specific staging scheme take precedence over the General Guidelines on p. 10.
- Summary staging is based on a combination of clinical, operative and pathologic assessments. Clinical evaluations may include important staging information, such as skin involvement, missing from operative and path reports; but if some part of the clinical assessment is disproved by operative or pathologic findings, use the op/path findings. If information from an operative and path report conflict, priority goes to the pathologic assessment. An autopsy report should be given the same priority as a pathology report.
- When you have AJCC TNM staging recorded but no direct Summary Stage information, assign the Summary Stage 2000 code that is most equivalent to what the TNM staging reflects. If the medical record conflicts with a physician's TNM stage, the information in the record takes precedence; try to consult with the physician to see if s/he has information not available in the record, or if the record was incomplete at the time of the TNM staging.

- Include all information available within the following **timeframe**:
  through completion of first-course-of-treatment* surgeries **or**
  within four months of diagnosis *in the absence of disease progression*,
  whichever is longer.

  This applies to all cancers, including prostate. Do not stage too soon (before all the information you need is in the medical record). You must still report to the MCR in a timely manner, however; so when surgery is delayed for a case, you may need to report the case to us initially with an unknown Summary Stage; then be sure to call us (617-624-5645) when the Summary Staging is complete so that we can update the report.

  * *Note*: This refers to the SEER definition of "first course of treatment" which may include a much longer timeframe than the COC definition *under certain circumstances only*. Applying the COC definition here should not make a difference in most cases (see p. 29 in the NAACCR *Standards for Cancer Registries, Volume II: Data Standards and Data Dictionary, Sixth Ed.*, 2001 for a concise comparison of the COC and SEER definitions of "first course of treatment").

- Exclude any metastasis known to have developed after the diagnosis was established.
- Information obtained after the start of treatment (radiation, chemotherapy, hormone therapy, immunotherapy) may be used unless it falls outside the timeframe described in the "surgery/four-months" Guideline.
- Certain staging schemes are used for certain histologic types regardless of primary site:

  Kaposi Sarcoma of All Sites (page 274);

  Hodgkin and Non-Hodgkin Lymphomas of All Sites, excluding Mycosis Fungoides and Sezary Disease of Skin, Vulva, Penis, Scrotum (page 278);

  Hematopoietic, Reticuloendothelial, Immunoproliferative, and Myeloproliferative Neoplasms (page 280).

  If a case has one of these histologies, ignore the primary site when choosing your staging scheme (e.g., a stomach lymphoma should be staged using the lymphoma scheme, even though the stomach scheme does not specify that it excludes lymphomas.)

  *Most* schemes apply to all other histologies for the given primary sites, except as noted. See the lists on pages 285-287 of the staging manual.

  Some schemes are limited to certain sites and histologies in combination:

  Melanoma of Skin, Vulva, Penis, Scrotum (page 173) and Conjuctiva (page 252);

  Mycosis Fungoides and Sezary Disease of Skin, Vulva, Penis, Scrotum (page 176);

  Melanoma of Cornea, Retina, Choroid, Ciliary Body, Eyeball, and Overlapping and Other Eye (page 256);

  Retinoblastoma (page 258).

Ambiguous terms may be used in the medical record to describe tumor involvement. The following should be used as a guide when assigning Summary Stage 2000:

**Involved:** Consider the following terms to be indicative of cancer involvement:

- adherent
- apparent(ly)
- appear(s) to
- comparable with
- compatible with
- consistent with
- contiguous with
- continuous with
- encroaching upon*
- extension to, into, onto or out onto
- features of
- fixation to another structure**
- fixed**
- impending perforation of
- impinging upon
- impose/imposing on
- incipient invasion
- induration***
- infringe(s)/infringing
- into*
- intrude(s)
- invasion to, into, onto or out onto
- matted (indicates involvement for lymph nodes only)
- most likely
- onto*
- overstep(s)
- presumed
- probable
- protruding into (unless encapsulated)
- suspect(ed)
- suspicious
- to*
- up to

* indicates cancer involvement whether found in a clinical, operative or pathologic description

** indicates that the *other* structure or tissue is involved

*** used to describe surrounding fibrous or connective tissue adjacent to the tumor; interpreted as extension of the malignant growth

**Not Involved:** Consider the following terms to be indicative of cancer non-involvement:

- abuts
- approaching
- approximates
- attached
- cannot be excluded
- cannot be ruled out
- effaces/effacing/effacement
- encases/encasing
- encompass(es)
- entrapped
- equivocal
- extension to without invasion
- extension to without involvement of
- kiss(es)/kissing
- matted (except for lymph nodes)
- possible
- questionable
- reaching out
- rule(s) out
- suggests
- very close to
- worrisome

The special use of some terms in the *Summary Staging Manual 2000* are discussed on page 14 therein. When used in other places, these terms may have different meanings.

"adjacent organ(s)": Anatomic structures with specific physiologic functions other than (or in addition to) support and storage that are located next to the primary site organ.

"adjacent structure(s)": connective tissues large enough to have been given a specific name (for example, brachial artery, broad ligament)

"adjacent tissue(s), NOS": This term may appear in the staging schemes for ill-defined and non-specific sites. The term is used to mean "the unnamed tissue(s) that immediately surround an organ or structure containing a primary cancer". The tumor has invaded past the outer border (capsule, serosa, other edge) of the primary organ into the organ's supportive structures but has *not* invaded larger structures and adjacent organs.

"connective tissue(s)": These do not generally have specific names. They include adipose tissue, aponeuroses, blood vessels, bursa, fascia, fatty tissues, fibrous tissues, ganglia, ligaments, lymphatic channels, muscle, nerves (spinal, sympathetic, peripheral), skeletal muscle, subcutaneous tissue, synovia, tendons, tendon sheaths, unidentified vessels and veins. Blood, cartilage and bone are *not* considered "connective tissues" in the Summary Staging manual.

"cortex", "cortical": the external or outer surface layer of an organ

"marrow", "medulla", "medullary": the interior central portion of an organ

"parenchyma": the functional portion of an organ, as distinguished from its framework or stroma; the place where most malignancies arise

"stroma": the cells and tissues that support, store nutrients, and maintain viability within an organ; consists of connective tissue, vessels and nerves; provides the framework of an organ

***In Situ* (Code 0)**

A diagnosis of "*in situ*" must be based on microscopic examination of tissue or cells. An *in situ* tumor has all the characteristics of malignancy except invasion (i.e., the basement membrane has not been penetrated). A tumor that displays any degree of invasion is not classified as *in situ* (it is at least localized). For example, if a report states "carcinoma *in situ* of the cervix showing microinvasion of one area", then the tumor is not *in situ.* A primary tumor may involve more than one site (e.g., cervix and vagina, labial mucosa and gingiva) and still be *in situ* if it does not show any invasion. If a tumor is Summary Staged as *in situ,* its Behavior Code (see pages 85-88) is **2**. Organs and tissues that have no epithelial layer and basement membrane cannot be Summary Staged as *in situ*; only carcinomas and melanomas may be staged *in situ.* For carcinomas and melanomas, if all reports are negative for disease spread and the pathologist states that the cancer is noninvasive or noninfiltrating, code as **0**.

Certain terms indicate an *in situ* stage:

- confined to epithelium
- intracystic
- intraductal
- intraepidermal
- intraepithelial
- intrasquamous
- involvement up to but not including the basement membrane
- no penetration below the basement membrane

- no stromal invasion
- noninfiltrating
- noninvasive
- preinvasive
- Stage 0

**Localized (Code 1)**

A localized tumor invades beyond the basement membrane, but is still confined entirely to the organ of origin. For most sites, a localized tumor may be widely invasive or have spread within the organ, as long as it does not extend beyond its outer limits and there is no evidence of metastasis to other parts of the body. If all reports are negative for disease spread and the pathologist states that the cancer is invasive or infiltrating, use code **1**.

Inaccessible Sites - Clinical diagnosis alone may be insufficient for staging a tumor "localized" when the primary site and regional nodes are inaccessible, such as with the esophagus or lung. Without confirmation from surgery/autopsy, it is usually preferable to use code **9** ("unstageable"); but, if a physician stages the case "localized", or if clinical reports (like CT scans) provide enough information to rule out further disease spread, code **1** may be used; if surgery was done, study the operative report for evidence of direct extension or metastasis; if surgery and radiology have produced no such evidence, assign code **1**.

Vessel / Lymphatic Involvement -- Invasion of blood vessels, lymphatics and/or nerves *within* the primary site is localized, unless there is evidence of disease outside the site.

Microinvasive -- This term, used by pathologists to describe the earliest invasive stage, has precise meaning for cancer of certain sites. Microinvasive cancers are staged as "localized".

**Regional (Codes 2, 3, 4, 5)**

A tumor at the "regional" stage has grown beyond the limits of the organ of origin -- into adjacent organs or tissues by direct extension, and/or to regional lymph nodes by metastasis. Cancer becomes regional when there is the potential for spread by more than one lymphatic or vascular supply route. If *in situ*, localized and distant stage categories have been ruled out, then the stage may be assumed to be regional. Neoplasms appearing to be in the "regional" stage must be evaluated very carefully to make sure they have not spread any further.

*Example*: A malignant tumor of the stomach or gallbladder often passes through the wall of the primary organ into surrounding tissues. Before coding as regional, make certain that radiological or scan exams do not reveal metastasis to lung or bone and that surgery did not reveal metastases to non-regional tissues. Check progress notes and discharge summary for any mention of metastases.

Regional, by Direct Extension or Contiguous Spread Only (Code **2**) -- Sometimes a cancer spreads to surrounding organs or tissue with no involvement of regional lymph nodes. The cancer invades through the wall of the organ of origin into surrounding organs and/or adjacent tissues. Before assigning code **2** to such a case, make sure that tissue adjacent to the original organ is actually involved. The terms "penetrating", "extension" and "metastases" are sometimes used to describe spreading within an organ, such as the large intestine or bladder, in which case the stage might still be "localized" (code **1**). The *Summary Staging Manual* lists organs and structures considered to be regional for each site.

Regional, to Lymph Nodes Only (Code **3**) -- If a cancer continues to grow after the onset of local invasion, regional lymph nodes draining the area usually become involved. The cancer invades the walls of lymphatics and may travel to and grow in nearby nodes. Enter code **3** if nodal involvement is indicated and there is no other evidence of extension beyond the organ of origin. For carcinomas, if there are lymph nodes involved, then the stage is at least regional. Words like "local" and "metastasis" appearing in medical records sometimes cause confusion in staging. Failure to recognize the names of regional lymph nodes might lead to incorrect staging. The *Summary Staging Manual* and the AJCC's *Cancer Staging Manual* contain helpful information about the names of regional and distant nodes.

*Examples*: "Carcinoma of the stomach with involvement of *local* lymph nodes" should, lacking further evidence, be considered "regional" and coded **3**.

Statements like "carcinoma of the breast with axillary lymph node *metastasis*" and "carcinoma of the stomach with *metastasis* to perigastric nodes" indicate metastasis to regional nodes and should be assigned code **3**.

Regional nodes are listed for each staging scheme. Consider the farthest specific node chain involved. Any nodes that are removed along with the resected primary site specimen that are not specifically identified should be considered "regional lymph nodes, NOS". If a specific node chain is named but is not listed in the staging scheme, first determine if the recorded name is synonymous with a listed regional chain (see page 284 in the *Summary Staging Manual*); otherwise, assume that these are *distant* lymph nodes (**7**). Unless stated to be contralateral or bilateral, assume that lymph nodes mentioned are ipsilateral (homolateral).

For lymphomas, *any mention* of lymph nodes indicates *involvement*. For solid tumors, the terms "fixed", "matted" and "mass in the mediastinum, retroperitoneum, and/or mesentery" without specific information as to the types of tissue involved are considered to indicate lymph node involvement. The terms "palpable", "enlarged", "visible swelling", "shotty" and "lymphadenopathy" are to be *ignored* except for lung primaries; for lung primaries, these terms *are* interpreted as regional lymph node involvement.

Bilateral lymph node metastases do not necessarily indicate distant spread. For primaries on the body's midline (e.g., esophagus), bilateral node involvement is regional. Check each staging scheme carefully.

Regional, Direct Extension and Lymph Nodes (Code **4**) -- Enter code **4** when a tumor has metastasized to regional lymph nodes *and also* has spread to regional tissue via direct extension, but there is no evidence of metastasis to a distant site or distant lymph nodes.

Regional, NOS (Code **5**) -- If available information states only that a cancer has spread regionally, Summary Stage to code **5**. This indicates that you cannot determine if the spread is to regional nodes only, by direct extension of the tumor only, or both. Some staging schemes have this as the only Regional code available because the "direct extension" and "regional lymph node" categories do not apply (for example, brain cancers and lymphomas).

**Distant Site(s) and/or Distant Node(s) Involved (Code 7)**

Distant metastases are tumor cells that have broken away from the primary tumor, traveled to other parts of the body, and have begun to grow there. This may be called "diffuse", "disseminated", "metastatic", "remote" or "secondary" disease. In most cases there is no continuous trail of tumor cells between the primary and distant sites. Cancer cells may travel from the primary site and grow distantly by several routes:

by direct tumor extension from the primary organ through adjacent tissues into a non-regional organ;

by travel in lymph channels beyond the first (regional) drainage area to distant nodes;

invasion of blood vessels within the primary site, allowing hematogenous (blood-borne) disease spread to blood vessels in distant sites;

by implantation or seeding through fluid within a body cavity.

Some distant sites and nodes are listed within a staging scheme, but obviously not *all* sites and nodes that are not regional can be listed. *Assume* that any site or node chain not listed as "regional" is distant, even if the site/node is not listed as "distant"; but be careful in case the terminology in the medical record is a *synonym* for one of the regional sites or node chains.

Common sites of distant spread are liver, lung, brain and bones, but these sites are not usually listed as distant in the staging schemes. Do not assume that involvement of these sites is distant spread for every case. For example, if the primary site is adjacent to the liver (like the gallbladder), then the liver may be regionally involved by direct extension of the primary tumor; determining if the *outside* surface of the secondary organ is involved or if the cancer grew discontinuously from *inside* the secondary organ is key.

Hematopoietic, reticuloendothelial, immunoproliferative and myeloproliferative neoplasms are considered distant disease and are coded with **7** except as noted in each staging scheme.

**Unstageable; Unknown; Unspecified; Unknown if Extension or Metastasis (Code 9)**

If information in the medical record is insufficient to assign a Summary Stage, enter **9**. This code should be applied sparingly. If possible, contact a physician to see if there is information available about the case that is not included in the medical record.

The staging scheme for "Other and Ill-Defined Sites, Unknown Primary Site" (p. 281) includes *only* code **9**. If the primary site is unknown -- even if disease found is presumed metastatic -- the Summary Stage must be **9**.

---

Use only the codes shown in the *SEER Summary Staging Manual 2000* for a specific staging scheme. The *general* code categories follow:

| Extent of Disease | Code |
|---|---|
| *in situ* | **0** |
| localized only | **1** |
| regional, by direct extension only | **2** |
| regional, to lymph nodes only | **3** |
| regional (both **2** and **3**) | **4** |
| regional, NOS | **5** |
| distant site(s)/node(s) involved | **7** |
| unstageable, unknown, or unspecified; unknown if extension or metastasis | **9** |

Not all of these codes apply to every staging scheme. For example, in the Brain and Cerebral Meninges scheme (page 266), only codes **1**, **5**, **7** and **9** are applicable.

The Guidelines on page 11 of the *Summary Staging Manual 2000* may be used for efficient Summary Staging. They are not reproduced here.

Pediatric Stage

NAACCR Version 9.1 Item 1120, columns 479-480

The staging scheme for an adult cancer case is not always applicable to the same disease when it develops in a child. Several pediatric intergroup studies and cooperative groups have developed their own staging criteria for pediatric cases. As indicated in the code table (next page), certain stage categories are only defined for certain diagnoses.

Record the Pediatric Stage code as specified in the Pediatric Staging System that was used to stage the case (see next field). This field has 2 characters; if the code is only one character, record it on the left and leave the second space blank. Truncate the least significant subdivision of the category from the right as needed.

Use code **88** for all non-pediatric cases.

Pediatric cases are most often staged by physicians. For your information, Appendix H includes a Pediatric Staging Guide that may provide some reference for what stages of disease are reflected by some of the standard Pediatric Stage codes. (Other physicians and facilities may choose to apply different staging schemes or rules than those in Appendix H.)

Codes for the "Pediatric Stage" field:

| Pediatric Stage | Applicable Case Types | Code |
|---|---|---|
| Stage I | | **1_** |
| Stage IA | rhabdomyosarcoma and related sarcomas only | **1A** |
| Stage IB | rhabdomyosarcoma and related sarcomas only | **1B** |
| Stage II | | **2_** |
| Stage IIA | rhabdomyosarcoma and related sarcomas only | **2A** |
| Stage IIB | rhabdomyosarcoma and related sarcomas only | **2B** |
| Stage IIC | rhabdomyosarcoma and related sarcomas only | **2C** |
| Stage III | | **3_** |
| Stage IIIA | liver, rhabdomyosarcoma and related sarcomas, Wilms tumor only | **3A** |
| Stage IIIB | liver, rhabdomyosarcoma and related sarcomas, Wilms tumor only | **3B** |
| Stage IIIC | Wilms tumor only | **3C** |
| Stage IIID | Wilms tumor only | **3D** |
| Stage IIIE | Wilms tumor only | **3E** |
| Stage IV | | **4_** |
| Stage IVA | bone only | **4A** |
| Stage IVB | bone only | **4B** |
| Stage IVS | neuroblastoma only | **4S** |
| Stage V | Wilms tumor, retinoblastoma only | **5_** |
| Stage A | neuroblastoma only | **A_** |
| Stage B | neuroblastoma only | **B_** |
| Stage C | neuroblastoma only | **C_** |
| Stage D | neuroblastoma only | **D_** |
| Stage DS | neuroblastoma only | **DS** |
| not applicable (not a pediatric case; adult patient) | | **88** |
| unstaged; unknown; best code not valid* | | **99** |

* Not all codes that might be considered valid within the Pediatric Staging Systems on page 141 have valid codes in the table above. If a pediatric case has been staged using a Staging System on page 141 but you cannot assign one of the codes above, enter a **99** in the Pediatric Stage field and code the System used in the Pediatric Staging System field; include an explanation in a Staging Narrative. Example: a child's case is diagnosed in 2001 as "metastatic" under the SEER Summary Staging system; enter **05** for Pediatric Staging System, **99** for Pediatric Stage, and **7** in the regular Summary Stage 2000 field.

## Pediatric Staging System

NAACCR Version 9.1 Item 1130, columns 481-482

This field records the specific staging system used to stage a pediatric case so that the stage code recorded can be interpreted.

Use code **88** for all non-pediatric cases. Record **00** when a pediatric case was not staged. Use **97** when the case was staged using a system other than those identified in codes **01-15**. Use code **99** if a pediatric case was staged, but the staging system used is unknown to you.

| **Staging System** | **Code** |
|---|---|
| none (a pediatric case, but it was not staged) | **00** |
| American Joint Committee on Cancer (AJCC) | **01** |
| Ann Arbor | **02** |
| Children's Cancer Group (CCG) | **03** |
| Evans | **04** |
| Summary Stage (1977 or 2000)* | **05** |
| Intergroup Ewing | **06** |
| Intergroup Hepatoblastoma | **07** |
| Intergroup Rhabdomyosarcoma | **08** |
| International System | **09** |
| Murphy | **10** |
| National Cancer Institute (pediatric oncology) | **11** |
| National Wilms Tumor Study | **12** |
| Pediatric Oncology Group (POG) | **13** |
| Reese-Ellsworth | **14** |
| SEER Extent of Disease | **15** |
| not applicable (not a pediatric case; adult patient) | **88** |
| other (a pediatric case staged using a staging system not listed here) | **97** |
| unknown (a staged pediatric case, but the system used is unknown) | **99** |

* If a pediatric case has been assigned a SEER Summary Stage, code this stage in the regular Summary Stage 1977 or Summary Stage 2000 field (based on the year of diagnosis) because not all of the Summary Stage codes (0, 1, 2, 3, 4, 5, 7, 9) are valid for the Pediatric Stage field; and then record **99** in the Pediatric Stage field.

Regional Nodes Examined

NAACCR Version 9.1 Item 830, columns 400-401

This field describes the total number of regional lymph nodes *examined* by a pathologist. Include nodes considered "regional" and used in the pN Element according to the AJCC *Cancer Staging Manual, Fifth Ed*. Code *all* regional lymph nodes removed as part of first course of therapy (see pages 149-150 for the definition of first course of therapy). If nodes were removed at different times during first course of treatment, be sure to include all of them here. Do not include nodes removed to just establish recurrence or disease progression.

*Notes*: The number coded in this field may not be the same as in "Number of Regional Lymph Nodes Removed -- Summary". "Number of Regional Lymph Nodes Removed -- Summary" refers only to nodes removed during the procedure coded in "Surgery of Primary Site -- Summary"; "Regional Nodes Examined" refers to *all* regional nodes removed during the entire first course of treatment.

Also, a tumor nodule (>3 mm in diameter) removed in adjacent tissue may be counted as a regional node for AJCC staging purposes, even if pathology later found no residual node tissue in that nodule. (See pages 6-7 and appropriate sites in the AJCC *Cancer Staging Manual, 5th Ed*. for these rules.) Such a nodule could be counted as a node in "Regional Nodes Examined" and "Regional Nodes Positive", but would *not* be counted in the "Number of Regional Lymph Nodes Removed" *surgery* fields.

Use code **00** when no regional nodes were removed.

Use code **95** when a lymph node aspiration was performed and the cytology or histology was positive for malignant *cells*, but no *nodes* were actually removed.

Use code **99** if information about regional lymph node removal is completely unknown, and for sites and histologies for which regional lymph node removal is not applicable.

*Examples*:
brain primary
leukemia
lymphoma
multiple myeloma
unknown primary
patient treated pre-operatively with radiation, chemotherapy, hormone therapy or immunotherapy

The codes for "Regional Nodes Examined" follow:

| | |
|---|---|
| No regional lymph nodes were removed. | **00** |
| One regional lymph node was removed. | **01** |
| Two regional lymph nodes were removed. | **02** |
| ... | **...** |
| Ninety *or more* regional lymph nodes were removed. | **90** |
| No regional lymph node(s) removed, but aspiration of regional lymph node(s) was performed. | **95** |
| Regional lymph node removal documented as a *sampling*, and # of regional nodes unknown/not stated. | **96** |
| Regional lymph node removal documented as *dissection*, and # of regional nodes unknown/not stated. | **97** |
| Regional lymph nodes surgically removed, but # of nodes unknown/not stated *and* their removal was not documented as a "sampling" or a "dissection". | **98** |
| not applicable; not stated; unknown; death certificate only | **99** |

Regional Nodes Positive

NAACCR Version 9.1 Item 820, columns 398-399

This field describes the number of regional lymph nodes examined by a pathologist and reported as containing tumor. Include all regional nodes removed during first course of treatment (see pages 149-150 for the definition of first course of treatment). Include nodes considered "regional" and used in the pN Element according to the AJCC *Cancer Staging Manual, Fifth Ed*. Be sure that the number coded in this field (up to **89**) does not exceed the number coded for "Regional Nodes Examined".

*Examples*: Pathology report reads "11/17 nodes examined contain metastatic squamous cell carcinoma". Enter **11** for "Regional Nodes Positive".

No regional lymph nodes were removed during first course of treatment. "Regional Nodes Examined" is **00**, and "Regional Nodes Positive" is **98**.

*Note*: A tumor nodule (>3 mm in diameter) removed in adjacent tissue may be counted as an involved regional node for AJCC staging purposes, even if that nodule was not found to contain node tissue. (See pages 6-7 and appropriate sites in the AJCC *Cancer Staging Manual, 5th Ed*. for these rules.) Such a nodule could be counted as an involved regional lymph node in the "Regional Nodes Removed" and "Regional Nodes Positive" fields, but would *not* be counted in the "Number of Regional Lymph Nodes Removed" *surgery* fields.

Use code **97** when the cytology or histology from a lymph node *aspiration* is positive for malignant cells.

Use code **98** when no regional lymph nodes were found positive because none were ever examined.

Use code **99** if information about the regional lymph node status is unknown, or if regional lymph node removal is not applicable for the case.

*Examples*: brain primary
leukemia
lymphoma
multiple myeloma
unknown primary site
patient treated pre-operatively with radiation, chemotherapy, hormone therapy or immunotherapy

The codes for "Regional Nodes Positive" follow:

| | |
|---|---|
| All regional nodes examined were negative. | **00** |
| one positive regional node | **01** |
| two positive regional nodes | **02** |
| ... | **...** |
| ninety-six *or more* positive regional nodes | **96** |
| Positive regional nodes were reported, but the number was not specified. | **97** |
| No regional nodes were examined. | **98** |
| Regional nodes were examined, but it's unknown if they were positive or negative; not applicable | **99** |

EOD -- Extension

NAACCR Version 9.1 Item 790, columns 393-394

This field is not required for the MCR, but we will collect anything that we find in this field when you submit case records. If you use SEER Extent of Disease coding at your facility, you may fill this field according to the rules in the *SEER Extent of Disease, 1988: Codes and Coding Instructions, Third Ed*. (1998). The field will be read at the MCR, but not edited.

EOD -- Extension Prostate Pathology

NAACCR Version 9.1 field “EOD--Extension Prost Path”, Item 800, columns 395-396

This field is not required for the MCR, but we will collect anything that's in this field when you submit cases. If you use SEER Extent of Disease coding, you may fill this field according to the rules in the *SEER Extent of Disease, 1988: Codes and Coding Instructions, Third Ed*. (1998). The field will be read at the MCR, but not edited.

EOD -- Lymph Node Involvement

NAACCR Version 9.1 field "EOD--Lymph Node Involv", Item 810, column 397

This field is not required for the MCR, but we will collect anything that we find in this field when you submit case records. If you use SEER Extent of Disease coding at your facility, you may fill in this field according to the rules in the *SEER Extent of Disease, 1988: Codes and Coding Instructions, Third Ed*. (1998). The field will be read at the MCR, but we will not edit it.

## Staging Narratives

The following seven fields are free text fields that should include information important to understanding and interpreting exactly how the case was diagnosed, evaluated and staged. Use standard abbreviations. Please be concise, but be sure to include relevant *details* such as the exact names of involved nodes and metastatic sites. Dates may be important to understand the order in which information about the case was accumulated. Dividing up the information among the given categories (clinical exams vs. pathologic assessments, for example) helps us interpret how to weigh all of the information reported. The information related to staging determination is most important to us, but please include anything else that *you* think will be important for us to know about the case.

Because all Massachusetts facilities that diagnose and/or treat cancer are required to report to the MCR, we should eventually receive a complete account of all activities related to how each patient was diagnosed, evaluated and treated (through the beginning of first course of therapy). Your own facility is the *best* source of information about what went on *there*; the second-hand reporting of results obtained at other facilities is often less accurate than the information we should receive directly from those facilities. If you are including relevant information obtained from other facilities or physician offices, please indicate which information came from where. In case of conflicting information received from multiple facilities, this helps the MCR determine who actually did what to the patient and when.

Text--Dx Proc--PE

NAACCR Version 9.1 Item 2520, columns 1917-2116

This narrative field records information summarized from patient history and physical examinations. Up to 200 characters are allowed. Please put the information that is most pertinent to staging up front. Please avoid including sensitive patient information (such as history of drug abuse or HIV status) that is irrelevant to the essential functions of the central registry. Leave the field empty if the medical record includes no information relevant to this text category.

Text--Dx Proc--X-Ray/Scan

NAACCR Version 9.1 Item 2530, columns 2117-2366

This narrative field records information summarized from diagnostic imaging reports. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Dx Proc--Scopes

NAACCR Version 9.1 Item 2540, columns 2367-2616

This narrative field records information summarized from endoscopic examinations. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Dx Proc--Lab Tests

NAACCR Version 9.1 Item 2550, columns 2617-2866

This narrative field records information summarized from laboratory results other than cytology or histopathology. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Dx Proc--Op

NAACCR Version 9.1 Item 2560, columns 2867-3116

This narrative field records information summarized from operative reports. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Dx Proc--Path

NAACCR Version 9.1 Item 2570, columns 3117-3366

This narrative field records information summarized from cytology and histopathology reports. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Staging

NAACCR Version 9.1 Item 2600, columns 3447-3746

This narrative field records any information relevant to a case's staging that is not included elsewhere in the data and text fields collected by the MCR*. This might include the number of tumors in the primary site, risk factors not included in the patient history or physical examination, or the fact that staging occurred after treatment (as in a "yTNM" stage). If there is anything relevant to the staging that you could not fit into one of the other narrative categories, include it here (labeled, for example, as "Path Results continued..."). Also include anything relevant which you don't think really belongs in one of the other categories. Up to 300 characters are allowed.** Leave the field empty if it is not applicable to a particular case.

* Appreciate that there are many standard fields that may be on your data system that are **not** collected by the MCR which may include information related to the stage. For example, we do not collect the "sites of distant metastasis" fields, the "TNM stage descriptor" fields, Date of First Positive Biopsy, and "screening/biopsy procedures" for breast and prostate cases.

** The CIMS Satellite system can only hold 200 characters in this field.